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ABSTRACT

An issue of "Policy Notes" from the Institute for Research on Educational Finance and Governance (IFG) presents the proceedings of a conference held in October 1984 that focused on the question of what public and private schools can learn from each other. The issue itself consists of an overview addressing important issues in the public/private comparison and briefly reviewing the conference papers that were presented. Also included in this compilation are 12 looseleaf (unbound) "Policy Perspectives" sheets (each dated Winter/Spring 1985) summarizing the 15 conference papers. Topics include academic achievement in public and Catholic schools, promoting effective schools, differences in school organization and administration, affiliations of private schools, private school participation and public policy, public and private schools abroad, secular schools and religious values, tuition tax deductions, desegregation and private schools, blacks in urban private schools, and patterns of minority employment in public and private schools. (TE)

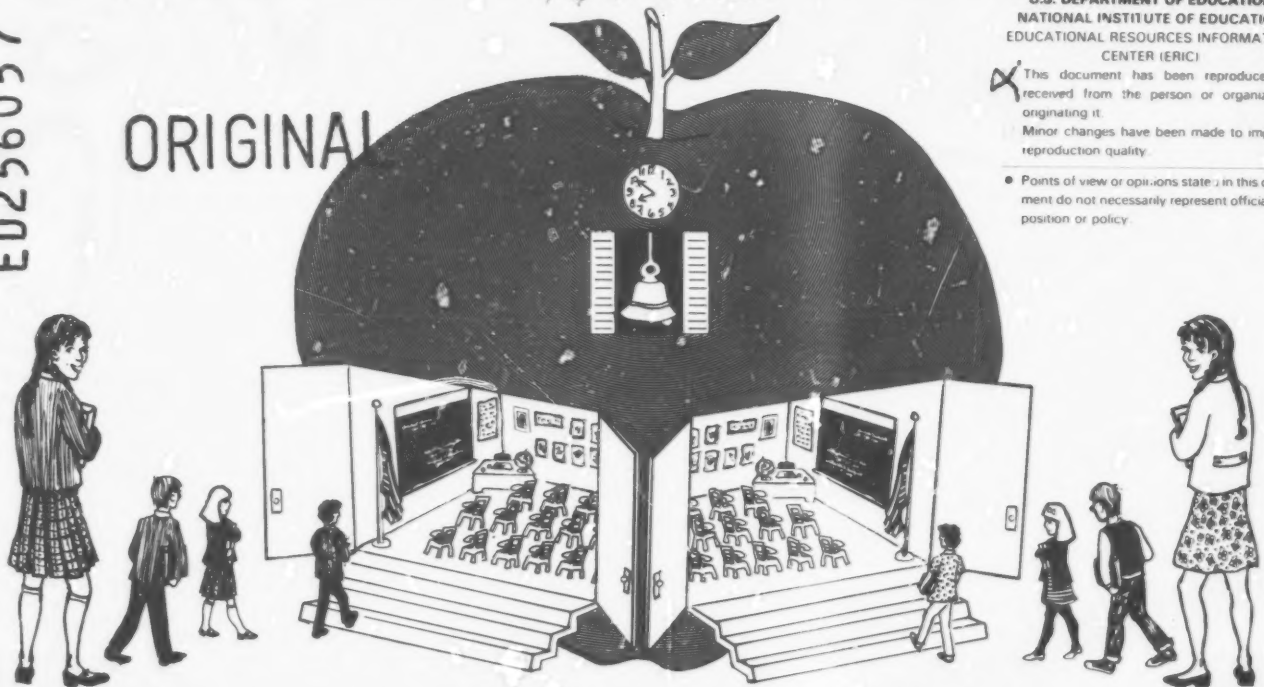
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ORIGINAL



PUBLIC & PRIVATE SCHOOLS

In a curious American way, both sides make a system. Even when there is competition, the partisans of each sector know in their hearts that they are two sides of the same coin, and that each needs the other to thrive.

The latest wave of educational reform in the United States shows that people are worried about the quality of the schools their children attend. As in earlier periods of dissatisfaction and reform, the 1980s are demonstrating a widespread belief that changes will be necessary to improve education. Politicians, educational leaders and public opinion generally are raising the issue of schooling to a high place on the agendas of states and communities. New policies are being considered across the nation, and researchers are delving into

many aspects of schooling practices in search of recipes for excellence. What is different in the current round of reform, however, is a more widespread interest in the value of private along with public education.

To many people, this shift of perspective is less surprising than the much longer tradition of treating private schools as a shadow institution outside the pale of government-sponsored education. Parents want good schools, whether public or private. Alert to rising demands for better education, reformers

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and school leaders hope to find out more about effective schooling and how to produce it, wherever it may be discovered. No matter what the auspices of the school, educators share a common interest in the cultivation of learning, "the contained explosion of young minds," as Father Timothy Healy, president of Georgetown University, called it recently at an IFG conference on public and private education.

Father Healy's speech drew upon the analogy of public and private higher education. "In a curious American way," he suggested, "both sides make a system." Even when there is competition, the partisans of each sector "know in their hearts that they are two sides of the same coin, and that each needs the other to thrive." This is the reality for elementary and secondary education as well as for higher education. Healy finds it odd that leaders of the public system worry about competition from private schools, "like the elephant complaining that the mouse's weight will break the bridge."

A veteran of both public and private schools, having taught and served as an executive officer at Fordham University, City University of New York, and Georgetown University, Healy argued that public schools can learn from private schools. One important lesson after two decades of program innovation in public schools is the necessity of maintaining a coherent curriculum.

Second, many private schools can show the way in learning how to avoid compromising the educational process in the classroom. Acknowledging some of the recent reform studies that point to similar conclusions, he mentioned smaller classes, homogeneous groupings of students, high expectations, more streaming of students in basic subjects, designating master teachers, strengthening the role of the principal, and the need for something analogous to religious commitment, an "excitement, spiritual fulfillment and richness" in the devotion of teachers to their work.

Third, Healy urged public school leaders to observe the ways that private schools turn teachers into "a faculty," experiencing a sense of corporate responsibility and cohesive leadership. A sense of unity must become pervasive in the life

of the school. For the faculty who infuse life into the school, the pride of belonging can be enhanced through closer relationships with other educational institutions, particularly with local colleges and universities.

Public and private schools must stand together on the most basic needs for improving education, Healy argued. First and foremost, he cited adequate teacher salaries as a common goal across school sectors. To this goal he added the need to reduce the intervention of courts and



lawyers in the operations of schools. Further, there should be a more flexible interpretation of compulsory education laws for adolescents. Healy ended his speech by urging all those seeking better schools in both sectors to persevere in quest of "the integration of our society" through educational opportunity for minority groups.

A broadened perspective on schooling is becoming evident in current policy discussions. Researchers are devising new strategies of inquiry to show what public and private schools can learn from each other about better schooling. In the mixed public-private system of schooling that exists in the United States, it is becoming essential to have more information comparing the two sectors, identifying both successful and problematic characteristics within sectors, and tracking the magnitude, development and performance of student populations.

Many questions must be answered that compare the public and private sectors in order to illuminate schooling needs and policies:

- What is "public" and what is "private" in schooling today? Does the distinction influence the nature of the school and its educational practices?
- How strong are current trends toward privatization in schooling? Are they related to long-term trends toward greater secularization of education in the public sector?
- What draws people to public or private schools? If public subsidies are expanded to include private institutions on a larger scale than at present, what will be the effect on schooling in both sectors?
- Are there public and private aspects of all school decisions made by individ-

uals, families, communities, and society as a whole? What do parents think about when they choose a school?

- Are enrollments in the two sectors changing significantly, or is the situation relatively stable? Within the private sector, exactly where are the largest changes occurring, and what do these changes mean for education as a whole?

- Are private schools better than public schools? Do they generally produce higher levels of academic achievement? If so, how—and how much?

- How do the two sectors compare in serving the aims of social equity and equal educational opportunity? Are the disparities in family income of parents greater within one sector than the other, and how do the two sectors compare overall? Does one exhibit greater tendencies toward segregation? How does segregation come about differently within various kinds of schools in each sector?

- What is significant and what is misleading when quantitative differences are found between the public and private sectors? Are the quantifiable differences the right ones to be looking at to understand the identity of public and private schools?

- Is the profession of teaching distinctly different in public and private schools? How do salaries compare? Does the composition of the teaching force reveal any differences that show who tends to teach in public and private learning environments?

- How does the organization and authority of schooling differ between the two sectors? What can this contrast tell us in general about the educational program likely to be offered in public and private schools?

- Would proposals for greater public subsidies of private education lead to greater regulation by public authorities? If enacted, would such proposals make private education more "public"?

Beyond such questions lie other issues as well. Many people are wondering how today's schools, whether public or private, can recapture the cohesion, the face-to-face moral universe, of small communities. Some see private schools as the "common schools" of today, the place where moral instruction and civic learning occur with greatest intensity. Others see private schooling as inherently divisive. How do the two sectors prepare citizens for participating in a democracy? Equally important, how has each created obstacles to the achievement of that aim? What can the two sectors learn from each other in renewing moral education and civic learning? And how can the lessons

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Because of a burgeoning interest in the relevance of private schools to public policy discussions, IFG launched several related activities. First, IFG sponsored a conference on tuition tax credits in Washington, D.C., in October 1981. Co-sponsored by the National Institute of Education and the National School Finance Project, this conference featured a debate between Chester Finn, who helped to draft the Packwood-Moynihan tuition tax credit proposal for Congress, and Albert Shanker, president of the American Federation of Teachers.

Researchers presented 15 papers at the conference. Coming out of several academic disciplines and offering different modes of policy analysis, these papers embodied new research findings on tuition tax credits and interpretations of related background issues. Besides being widely reported in the education and general press, summaries of this research were enclosed in the Winter 1982 issue of *Policy Notes* and are still available from IFG. Revised versions of the full papers are published IFG reports and are also available in *Public Dollars for Private Schools: The Case of Tuition Tax Credits*, published in 1983 by Temple University Press.

Even before the 1981 conference, IFG initiated a complementary activity aimed at greater understanding of schools in the private sector. In December 1980 IFG started a research project using its interdisciplinary team of scholars to build a comparative

data base on public and private schools and to conduct a number of studies drawing from that base. The purpose of the activity was to examine differences in patterns of decision-making, internal structures of control, and resource allocation in schooling organizations in the public and private sectors. Focusing on the San Francisco Bay Area, the project resulted in close analysis of some key issues touching upon current policy discussions of public and private schools.

A third and more recent effort was a project entitled "The Organization and Performance of Private Schools," through which IFG is attempting to relate organizational structures and practices more precisely to educational outcomes such as student achievement. To accomplish this end, IFG is collaborating in the collection of follow-up data by the National Opinion Research Center for the High School and Beyond survey. What has been gained through this inquiry is rich information on teacher characteristics and other school features, making possible a more refined analysis of the determinants of achievement in public and private schools.

Finally, IFG sponsored a second conference on October 25-26, 1984, to delve more deeply into the question of what public and private schools can learn from each other. Besides Father Timothy Healy, who addressed this question directly in his keynote speech, the participants represented a spectrum of interests and opinions across the public and private sectors.

The group included researchers, policy-makers, school leaders and practitioners.

At the conference, researchers working on the forefront of comparative study of public and private education presented 14 papers examining critical issues of current interest. The majority of the papers were written under the auspices of IFG and were funded by the National Institute of Education. Four of the papers came from other NIE projects that produced research highly relevant to the topic of the conference. One paper was written under the auspices of the National Opinion Research Center and the University of Chicago. The discussion cut across sectors, interest groups, professional cultures. Just as the papers explored issues common to separate traditions of education, the conference succeeded in generating dialogue among people who routinely have few opportunities to communicate with each other and to articulate their common aims.

This issue of *Policy Notes* includes *Policy Perspectives* based on the conference papers and one additional paper addressing important issues in the public-private comparison. Taken together, these summaries offer new insight into public and private schools. IFG is preparing the full papers as reports, and they will also be collected as chapters in a book to be published by Falmer Press. The book will be edited by Henry M. Levin and Thomas James, who served as co-directors of the conference. ■

of cooperative understanding between the two sectors be spread widely to build a positive and sustaining education for children throughout the country—in all kinds of schools?

From Neglect to Public Discussion

This sudden need for information is a result of a long-standing neglect of private schools in public policy discussions. Private schools—the category includes all elementary and secondary schools not sponsored by the government—enroll more than 11 percent of the nation's pupils at these levels, according to recent reports of the National Center for Education Statistics (NCES). In the past the figure was even greater. Despite the spread of public schools in the last century, and despite the growth of public authority and regulation in the 20th century, the private sector of education has held its own as a vast delivery system of teaching and learning. Yet, private education has not received popular attention

or policy discussion commensurate with its share of the total educational market.

Much of this neglect was closely connected with the social history of schooling in the United States. Historically, private schools developed separately from, and often in opposition to, the public schools. Outside the legal structure established for public education, the private sector evolved along diverse lines of educational practice and institutional design, including a large share of religious, especially Catholic, schools. Participation in private schools did not go unchallenged in the history of American education. When the controversy finally reached the U.S. Supreme Court in *Pierce v. Society of Sisters* (1925), testing a law that would have prevented children from attending private schools in Oregon, the court affirmed the right of parents to satisfy compulsory attendance requirements by sending their children to private schools. At the same time, the court recognized the authority of the state to

regulate private education.

Relatively independent of public authority, proud of their autonomy, private schools in the past remained relatively unknown to the larger world around them. Certainly in comparison with the trend today, they were less frequently counted, less scrutinized by the public eye in all of its forms—from media attention to political debate, from reform commissions to research and the gathering of statistics. This kind of institutional privacy still persists in some parts of the private sector, especially the Christian fundamentalist schools that have grown so rapidly during the last decade.

Nevertheless, even though many private schools still remain outside the purview of policy discussion, private education is very much in the public eye today. Many people—and not merely those traditionally aligned with the private sector—have come to believe that the problems of education cannot be

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understood without attending to private as well as public responses to the demand for good schools.

Over the past several years, educational research has followed suit by paying more attention to private schools. Researchers are attempting to develop ways of investigating issues that will increase comparative understanding of the two sectors. Building upon a growing base of information about private alternatives, policy discussions at the federal level and in many states are evincing greater acceptance of the proposition that the private vision of schooling may contain some of the answers to the question of how to improve American public education.

The neglect of private education in discussions of school policy is ending for other reasons as well. For example, after substantial declines in the 1960s and early 1970s, enrollments in private schools have stabilized, and over the past few years they have represented a slightly rising portion of total school enrollments in the nation. Accompanying this relative growth is a contention forwarded in two national studies published in 1982—*High School Achievement* by James Coleman, Sally Kilgore and Thomas Hoffer, and *Catholic High Schools and Minority Students* by Andrew M. Greeley—that private schools produce higher levels of student achievement than public schools with comparable students. Drawing criticism from other researchers, these studies have helped to stimulate interest in looking more closely at the differences between public and private schools.

In addition, there have been numerous attempts in recent years across all levels of educational governance to include private schools more fully in the public financing of education. Most prominent among the proposals for achieving this aim are tuition tax credits, tax deductions for school expenses, and educational vouchers. The U.S. Supreme Court has not yet accepted the constitutionality of tuition tax credits for parents who send their children to private schools, but in 1983 it did uphold tuition tax deductions (covering expenses in both public and private schools) in a case arising from a state law in Minnesota. Voucher initiatives continue to appear in state elections, backed by national advocacy groups and a network of academic speakers.

The *Perspectives* included here share an assumption that policy discussions at all levels of educational governance can be improved through a better comparative understanding of public and private

schools in the United States. The inquiry begins with an attempt to overcome past neglect by describing as accurately as possible the private sector of American education. Bruce S. Cooper addresses this task in a paper on the changing universe of private schools. Tracing the shifts in enrollments and numbers of schools across 20 categories of affiliation in the private sector, Cooper reveals the dynamic growth and adaptability of these institutions and the diversity of publics they serve.



While Cooper emphasizes the composition of the private sector, James S. Catterall compares public and private schooling in the aggregate. Focusing his analysis on general patterns of equity instead of on descriptive characteristics, Catterall compares such things as family income and racial balance between the two sectors. His paper also questions many current assumptions about expansion of the private sector and whether there will be a trend toward substantially greater growth in private school enrollments over the next few years.

Another issue to be explored is that of the overall organization of the two sectors and what difference this makes for education. Taking a broad view of the problem, Estelle James compares the two systems across different nations, viewing them as alternative ways of organizing the production of desired social goods. Using categories of economic analysis that emphasize supply and demand of educational services, she explains why private education arises and how it endures as a distinct way of organizing schools in different countries.

Of course, policy can have a large impact on where people choose to send their children to school. New financial policies—such as tuition tax credits—provide some examples with as yet untapped potential. A more familiar kind of policy whose effects have profoundly shaped education in the two sectors is that associated with religion. In a paper on the treatment of religion in public schools and its impact on the creation of private schools, Patricia M. Lines argues that the imposition of values in public schools and then the progressive secularization of these schools under public authority have been a major force in stim-

ulating the growth of private schools.

What would be likely to happen if public support for private schools were increased? This question has intrigued many people in discussions about public and private education. One way to expand the base of reliable information for answering it is to study a jurisdiction where such support does exist, even on a small scale, and then try to understand the decisions that parents make when confronted with greater incentives for choosing between the two sectors. In a paper on public policy and private choice in the case of Minnesota, Linda Darling-Hammond and Sheila Nataraj Kirby do just that by surveying parents in the state with a functioning program, approved by the U.S. Supreme Court in *Mueller v. Allen* (1983), that provides tax deductions for private and public school expenses.

Exploring further the issue of race as it is reflected in individual choices and student populations in the private sector, two papers examine the participation of Blacks in private schools. In a study of patterns of racial segregation in the nation's big cities, Robert L. Crain draws upon data from Chicago and Cleveland to show how Catholic schools sometimes reinforce and sometimes help to overcome racial isolation. In another study, Barbara L. Schneider and Diana T. Slaughter analyze survey and census data from Chicago to provide an explanation of recent patterns of change that reflect the realities of urban neighborhood schools in the private sector. As Black families choose urban private elementary schools in larger numbers, the racial balance of these schools changes significantly.

The status of teachers is another issue that needs to be explored in greater depth across the two sectors of schooling. Two of the conference papers make some initial advances using data from the IFG data set developed in the San Francisco Bay Area. In a study of patterns of compensation for teachers in public and private schools, Jay G. Chambers confirms that public school teachers earn more than private school teachers. He offers some reasoning for why these differences exist, while also probing more deeply into the patterns of variation within different parts of the private sector.

In a parallel study that examines the composition of the teaching force, Craig E. Richards and Dennis J. Encarnation explore the variation in minority employment rates within the public and Catholic schools. They find that whether schools are public or private does make a difference for minority participation in the



labor force. A general finding of considerable interest from the standpoint of educational policy is that the number of minority teachers employed appears to be related to the number of minority students enrolled in the schools where teachers work.

Any discussion about public and private education will inevitably deal with the issue of achievement comparisons between the two sectors, trying to sort out the strengths and weaknesses of recent claims that private schools perform better than public schools. Three conference papers used recent data available in the High School and Beyond study, a federally sponsored nationwide data base on high school students in public and private schools that enables researchers to compare achievement growth between the 10th and the 12th grades. Edward H. Haertel summarizes the three papers and compares the different approaches they take in analyzing achievement differences.

The first of these papers, defending the position that Catholic schools produce higher levels of achievement was "Achievement Growth in Public and Catholic Schools" by James S. Coleman, Thomas Hoffer and Andrew M. Greeley of the University of Chicago and the National Opinion Research Center. Taking the other side by identifying methodological problems and disputing the meaningfulness of the differences found were two papers, "School Sector and Cognitive Performance" by Karl L. Alexander and Aaron M. Pallas of Johns Hopkins University, and "Patterns of Academic Achievement in Public and Private Schools: Implications for Public Policy and Future Research" by J. Douglas Willms of the University of Edinburgh and the University of British Columbia. Similar versions of these papers are being published in the April 1985 issue of *Soci-*

ology of Education. Karl Alexander also provided the conference with another paper exploring these problems from a slightly different angle: "Comparing Public and Private School Effectiveness: Evidence and Issues". This paper is available as an IFG report.

In a paper dealing with organization within the public and private sectors in the United States, W. Richard Scott and John W. Meyer find that the environment of public schools is more centralized but also more fragmented than is the environment of private schools. This difference has tended to produce, simultaneously, both more complexity in administration and less coherence in programs among public schools.

In a related paper, Joan E. Talbert asks the question of whether private schools are useful models for improving school effectiveness. Reflecting upon the differing organization of the public and private sectors, Talbert summarizes the research literature on effective schools, then compares school sectors to see whether their organization offers the conditions necessary to produce school effectiveness. Apart from striking differences in selectivity and organizational environments, she also finds that the public and private sectors rely upon different kinds of authority to maintain themselves as institutions. In general, the organization of public schools presents greater obstacles than that of private schools in achieving school effectiveness.

Despite the variety of issues illuminated by these studies, the new research on public and private schools still leaves many questions unanswered. What has been done so far constitutes only the beginning of a range of studies that need to be made to understand the two sectors in comparative perspective. The purpose of this foray into selected issues is to help

improve the dialogue about school reform with a broader base of reliable information and research. By bringing together analyses from a variety of perspectives, the goal has been to compare the two sectors in illuminating ways, discovering more about the reality of schooling institutions and their implications for public policy.

At the conference, authors and other participants were reluctant to make sweeping policy recommendations. But three general orientations did emerge from the discussion, setting a reasonable tone for proceeding with thinking about how policy affects both public and private schools. There was an expressed consensus that the federal government should continue to play an active role in collecting accurate data on public and private schools—enrollments, institutions, and so forth. Further, it should become commonplace that representatives of all kinds of schools, public and private, have a voice in discussion of policies affecting them directly or indirectly.

Perhaps most important as a suggestion for the future, the conference itself was characterized by a constructive emphasis. An unspoken assumption prevailed—that both sectors have a role to play in American education, but that each needs to be understood in greater depth as it relates to the public interest. A better understanding of what public and private schools can learn from each other is part of the larger challenge of meeting this nation's pressing demand to provide quality education for a diverse citizenry. There needs to be not only a closer study of school life and organization, but more cooperation between disparate groups that share a common interest in education. Though not sufficient in themselves, these are necessary conditions for a renewal of public commitment to schooling in all of its forms. ■

ACADEMIC ACHIEVEMENT IN PUBLIC & CATHOLIC SCHOOLS What Do the Analyses Mean?

by Edward H. Haertel

Do Catholic high schools produce better academic achievement than public high schools? The question is of considerable policy importance. Historically, the American common school system has been viewed as a cornerstone of democracy, but in an era of declining test scores and waning public support and confidence, alternatives to public education are receiving increased attention. A finding that Catholic schools, with typically lower per-pupil costs, produced better academic outcomes than public schools might lend support to proposals for educational vouchers or tuition tax credits. At the very least, policymakers would want to examine educational practices in the private sector to see what might be learned about improving public education.

Comparing the effects of public versus Catholic schools is not as easy as it might seem. There is general consensus that on the average, Catholic high school students outperform public high school students on achievement tests, but there is also consensus that on the average, they enroll better students. While the full range of student achievement levels and

family backgrounds is represented in all kinds of schools, the students in Catholic schools tend, on the average, to be from more affluent families. They may also take their studies more seriously, be better behaved, have parents more concerned with their education, and so forth. At least part of the difference between Catholic and public school achievement is due to *selection effects*, or the selection of better students into Catholic schools.

Separating the effects of school type from the effects of selection requires extensive data and sophisticated statistical analyses. Supporters of public schooling can argue endlessly that the Catholic schools are free to turn away students with behavior problems, that Catholic school parents are more concerned about education, and so forth. Catholic school supporters can argue that a more rigorous curriculum, better school discipline, more homework, and higher standards would result in better achievement in Catholic schools regardless of student family backgrounds. Without data, there is no way to tell which type of schooling would produce better outcomes for students with the same advantages.

Given the importance of the question and the difficulty of finding an answer, it is not surprising that the release in spring 1981 of "Public and Private Schools" by James S. Coleman, Thomas Hoffer, and Sally Kilgore attracted national media attention, and prompted a flurry of re-analyses, professional critiques, and rejoinders. Coleman was principal investigator of a major national study of high school achievement and other outcomes, known as *High School and Beyond* (HSB). Sponsored by the National Center for Education Statistics and carried out by the National Opinion Research Center, this ongoing study has involved over 58,000 students in more than 1,000

schools, including over 80 Catholic and over 25 other private high schools.

Using data from the first year of the study, Coleman, Hoffer, and Kilgore attempted to assess the impact of Catholic schools apart from the effects of selection. They concluded that if students with the same background characteristics enrolled in public versus Catholic high schools, the Catholic school students' achievement would be superior. They also found that in Catholic high schools, the achievement gaps between races and social classes were smaller than in public schools. From this they argued that Catholic schools more nearly approximated the 19th century ideal of the common school, educating all students alike. This finding has been referred to as the *common school effect*.

Coleman and his co-authors also examined outcomes for non-Catholic private high schools in the HSB sample, but because of their diversity and small number as well as a higher rate of refusals to participate in the study, achievement effects for other private high schools could not be estimated precisely. For this reason, it is the contrast between the public and the Catholic high schools that is scrutinized most closely.

The 1981 preliminary report by Coleman and his colleagues, their 1982 final report, and their book, *High School Achievement*, also published in 1982, generated controversy in the research community. Their statistical methods and their conclusions were challenged on a number of grounds. The preferred method of studying schooling effects would be to use a *longitudinal* design, with data on the same students collected at two or more points in time. In 1981 and 1982, however, only *cross-sectional* data were available from the first year of the HSB study.

Edward H. Haertel is a professor in the School of Education at Stanford University. This *Perspective* summarizes four papers: "Achievement Growth in Public and Catholic Schools" by Thomas Hoffer, Andrew M. Greeley, and James S. Coleman, "School Sector and Cognitive Performance: When is a Little a Little" by Karl L. Alexander and Aaron M. Pallas, "Comparing Public and Private School Effectiveness: Evidence and Issues" by Karl Alexander, and "Patterns of Academic Achievement in Public and Private Schools: Implications for Public Policy and Future Research" by J. Douglas Willms.

While the effects of public and Catholic schools could still be estimated by comparing the test scores of 1980 sophomores to those of 1980 seniors, this kind of comparison required numerous statistical assumptions. For example, to adjust for the higher dropout rate in public high schools, dropout rates for the two sectors were estimated by comparing the size of sophomore and senior groups or cohorts in public high schools and in Catholic high schools. Next, assumptions were made about what the dropouts' score distributions would have been if they had been retested as seniors. The observed score distributions were then adjusted on the basis of these estimated rates and assumed distributions.

Whether the data are cross-sectional or longitudinal, the most basic statistical problem is to separate effects of sector from effects of selection. To accomplish this, the researcher must choose from the variables in the study a set capturing any background characteristics that differ, on the average, for the two sectors and that are related to achievement. For example, parents differ in the amount of encouragement given and interest shown in school work. If these differences are relevant to student achievement and if, on the average, Catholic school parents are more encouraging, then a variable representing this background characteristic should be sought. An available measure that might be used is the student's report of parental expectations for college attendance. In the same way, a measure of the student's own college plans might be included to account for differences in student motivation. Background variables

The results we have shown make it difficult to believe that the Catholic school impact on achievement growth of students from their sophomore to senior year is no greater or only trivially greater than that of the average public school. . . . If one concludes that these differences in growth are trivial, one must also conclude that the growth in achievement in the last two years of high school is also trivial.

It has often been assumed by American educators and educational researchers that Catholic schools were academically inferior — classroom size was larger, teacher training was less professional, resources more limited, per-pupil cost far smaller, religious narrowness perhaps more restrictive to thought and imagination. It might have been an undisturbing finding that, for all their apparent weakness, Catholic schools were not worse than public schools. To suggest that in terms of academic outcome they might be somewhat

like race, ethnicity, sex, and socioeconomic status are often included simply because they are related to patterns of achievement. These variables are not thought to influence achievement directly, but are included to represent an array of unmeasured differences in students' out-of-school environments.

If student background differences between the two sectors are not taken into account, then statistical estimates of the Catholic sector advantage will be *biased*. Generally, this bias will be in the direction of overstating the additional benefit of a Catholic school education. Using a statistical procedure called multiple regression, it is possible to adjust for differences in the chosen set of measured student characteristics, and when this is done, it is said that these variables have been statistically *controlled*. While statistical controls can certainly reduce the bias due to selection effects, there is no purely technical method of deciding just which measured characteristics must be controlled to completely remove this bias. There is always a possibility that not enough controls are used, so that unmeasured characteristics are responsible for what appears to be an effect of school type. Alternatively, the inclusion of too many controls can result in overcorrection. Researchers will choose different sets of background variables to control on the basis of their beliefs about the processes by which students are selected into public or Catholic schools, and of the processes both in school and out of school that lead to academic achievement.

Some form of control for initial achieve-

better is such a reversal of the conventional received truth, that one might well have expected intense debate. How could schools which have always been thought to be somewhat less effective be more effective, and how could schools thought to undermine the American ideal of the common school somehow be closer to that ideal than the public schools? . . .

The research results provide some clues to policies which can benefit achievement, whether in the public or private sector Catholic schools place in an academic track many whose sophomore achievement would relegate them to a general or vocational track in many public high schools. Catholic schools demand more homework and advanced coursework, especially from those who are disadvantaged in one way or another and especially from those who are not in the academic track. These differences are also consistent

ment differences is essential. The major advantage of longitudinal data is that this can be accomplished by including each student's own test scores at an earlier time in the set of control variables. With the cross-sectional data available through 1982, a less adequate form of control was used in the analysis by Coleman and his colleagues. The scores of 1980 seniors were adjusted on the basis of public versus Catholic school differences in the scores of 1980 sophomores. In their original analyses, Coleman, Hoffer and Kilgore also controlled for differences in family income, parental education, race and ethnicity, family size and structure, and several other variables.

Not only were the 1980 sophomores and the 1980 seniors different groups of students, but in the HSB study they had been given mostly different tests. Only eight vocabulary items, eight reading comprehension questions, and 18 general mathematics items were taken by both age groups. These three common subtests, comprising a total of 34 items, were all that were used for Coleman, Hoffer, and Kilgore's analyses.

In all of Coleman, Hoffer, and Kilgore's analyses, senior test scores were adjusted for differences between the two types of schools in sophomore scores. With control for additional student background characteristics and adjustments for differential dropout rates, they found higher achievement on all three tests in Catholic schools. With adjustments for additional background characteristics but not for dropouts, Catholic schools still showed larger gains in vocabulary and mathematics, but there was virtually no difference

with the "common school" findings of both analyses: that Catholic schools are especially beneficial to the least advantaged students: minorities, poor, and those whose initial achievement is low. For these students, the lack of structure, demands, and expectations found in many public schools is especially harmful.

Our analyses show that those public schools which make the same demands as found in the average Catholic school produce comparable achievement. This point has frequently been overlooked in the present controversy. The difference in average scores is the result of the fact that many public schools do not make such demands.

from "Achievement Growth in Public and Catholic Schools" by Thomas Hoffer, Andrew M. Greeley and James S. Coleman, pp. 56-58.

the same as it was in the cross-sectional analyses: to compare senior test scores after adjusting statistically for selection effects. With the longitudinal data, however, the students' own test scores from two years earlier can be incorporated in making these adjustments. Of course, there are still methodological differences, and there are still differences in interpretation. Most of the authors' methodological differences can be phrased as varying answers to the following four questions:

- How should prior achievement scores be used in adjusting for selection effects?

- Other than test scores, what measured student characteristics should be adjusted statistically to control for selection effects?

- Which test scores should be used to represent school outcomes?

- Should effects be interpreted primarily in units of raw scores, years of schooling, or fractions of a standard deviation?

These methodological differences are more than trivial matters of statistical taste. The alternatives lead to different estimates of Catholic sector effects, and to different interpretations of their importance. They are not technical questions of the kind that have some single, correct answer. Given the present state of knowledge, all of the authors' different choices are defensible. They are dictated by different conceptions of school policy, of the sources of individual differences in learning, of what is taught during the last two years of high school, and of appropriate public policy. The answers given to these four questions lead to different answers to a fifth question: What were the findings?

Hoffer and Coleman

How should sophomore test scores be used? Hoffer and Coleman adjusted only for earlier performance on the same test. In the analysis of senior science scores, sophomore science scores were controlled, in the analyses of senior writing scores, sophomore writing scores were controlled, and so forth. If sophomore test scores were free from error (had perfect reliabilities), this procedure would adjust perfectly for initial differences in students' knowledge of the particular items on each test.

What other characteristics should be controlled? Adjustments were also made for essentially the same background variables as in the earlier, cross-sectional analyses, and for some additional student characteristics. Together, these included socioeconomic status, race and ethnicity, sex, family size and structure,

parental expectations about college attendance, the student's own earlier report of college plans, region of the country, urbanization and other variables.

In thinking about the reasonableness of these choices, it may be helpful to consider the purpose for statistical controls in addition to sophomore test scores. The question might arise, given earlier achievement, why any additional controls would be required. If students with the same initial amount of knowledge are exposed to public versus Catholic instruction and then retested, it might seem that a direct comparison of their scores as seniors should reveal which type of school is superior, without any further corrections. Initial achievement, however, is only one of several influences on senior test scores. At least two other factors must also be taken into consideration.

First, Catholic and public school students may experience different out-of-school environments, as well as different classroom instruction, during the last two years of high school. Controls for additional background variables are needed to adjust for variations in these out-of-school experiences, so that whatever achievement differences remain can be attributed to the students' respective experiences in the classroom.

Second, even if initial achievement were controlled, differences might remain in public versus Catholic school students' aptitude for learning. Aptitudes are individual qualities that influence readiness to profit from further instruction. Given students with the same sophomore science achievement, for example, and the same out-of-school environments, the one with better study habits and greater reading ability would be expected to show larger gains in science regardless of type of high school, other things being equal. Aptitude and achievement are related, of course, but using sophomore test scores to control for initial achievement will not necessarily control for aptitude differences. For example, student or parental college aspirations or expectations might measure motivational aptitudes that would need to be controlled to obtain unbiased estimates of the Catholic school advantage.

In addition to controlling for out-of-school experiences during the last two years of high school and for initial aptitudes, other background characteristics might also help to control for differences in initial achievement. Sophomore test scores, even on the same test, do not provide a complete control for prior achievement. Carelessness on the one hand, and luck in guessing on the other, distort the measurement process so that a less-than-

perfect correlation is found even if the identical test is given twice, with no intervening instruction.

Which scores should be used to represent the outcomes? In the earlier, cross-sectional analyses, only the 34 items common to the 1980 sophomore and senior cohort test batteries were used. These were included in brief tests of reading, vocabulary, and general mathematics. For longitudinal analyses, there were seven tests administered to the same students as sophomores and again as seniors two years later. These included longer tests in the same three content areas (19, 21, and 28 items, respectively), as well as a test of more advanced mathematics, and tests of science, writing, and civics (10, 20, 17, and 10 items). When this HSB test battery was developed by the Educational Testing Service, these latter four tests were included in response to National Planning Committee recommendations, in a deliberate attempt to provide curriculum-specific measures of achievement emphasizing course content. These tests were intended to measure academic growth during the last two years of high school, while the reading, vocabulary, and general mathematics tests were to serve primarily as general ability measures.

Hoffer and Coleman did not make any significant use of this distinction between the general ability tests and the curriculum-specific tests. They combined the general and advanced mathematics tests to obtain a single mathematics score for each student, and used this together with the remaining five test scores as measures of school outcomes.

In what units should effects be reported and interpreted? All the authors first estimated the size of the Catholic school advantage in terms of additional items correct on each achievement test, although some used raw scores and others used formula scores. The use of formula scores, calculated by subtracting a fraction of the number wrong from the number right to correct for guessing, corresponds to the instructions students were given in the HSB testing. Analyses of raw scores or formula scores would generally give nearly identical results, except that the size of the Catholic sector advantage would be slightly larger expressed in raw score units than in formula score units.

Even though all of the authors began with the raw score or formula score metric, all but Greeley expressed the Catholic sector vantage in some other units for purposes of interpretation. For example, with controls for background, Hoffer and Coleman report the average sophomore-to-senior growth on the 19-item reading test to be 1.00 items for the public sector,

in reading. When neither dropout rates nor additional background characteristics were taken into account, gains in vocabulary and mathematics were larger for Catholic high schools, but there was a slight difference favoring public high schools on the reading test. In all cases, the estimated achievement differences were quite small, on the order of a fraction of a single item on each test, even after two years of schooling. Though small, these gains were nonetheless statistically significant, and they were about half as large as the overall, average sophomore-to-senior improvement in public schools. Coleman, et al. described them as amounting to about one grade level difference over the last two years of high school instruction.

There were additional analyses and additional conclusions. In support of the common school effect, Coleman and his colleagues found that student achievement in Catholic schools was more uniform than in public schools, and that public-Catholic differences were greater among students of low socioeconomic status (SES) and minority students than among the more advantaged. Other analyses sought to explain the findings of Catholic school superiority in terms of differences between sectors in the proportion of students assigned to academic tracks, courses taken, amount of homework done, school discipline, and other school policy variables.

The Critics' Responses

These conclusions by Coleman, Hoffer, and Kilgore were soon challenged on a number of grounds, including their choice of controls for selection effects, the statistical methods they used to adjust for these effects, and their interpretation of the effects they found as not only statistically significant but large enough to be of practical importance for policy. Other researchers soon published their own analyses of the HSB data, and Coleman and his colleagues responded with additional analyses addressing particular points their critics raised. Most of these examinations of the HSB data showed some Catholic sector advantage, generally somewhat smaller than the effects originally reported.

There is a large difference between the public and Catholic high schools in the proportion of students who report that they are taking an academic track or college preparatory curriculum. One point on which Coleman, Hoffer, and Kilgore received considerable criticism was their interpretation of this tracking variable as an indicator of school policy, rather than student background. They contended

that one of the ways Catholic schools achieved their superior results was by placing more students in these academically demanding courses. Critics argued that course selection was basically under the control of the individual student. The greater tendency of Catholic school students to enroll in academic courses might indicate differences in student motivation, future plans, or parental pressures, but not school policy.

There is probably some truth in both positions, but in the statistical analyses a choice must be made for one or the other. If tracking is primarily a matter of school policy, then including it among the controls for selection will result in overcorrection, possibly leading to an underestimate of the Catholic sector advantage. If tracking is primarily a matter of student choice, then failure to include it among the controls will result in undercorrection, possibly leading to an overestimate of the Catholic sector advantage. Coleman and his colleagues responded to criticisms on this point by conducting additional analyses, estimating separately the achievement differences between Catholic and public school academic-program students, and between Catholic and public school general-program students. In these analyses controlling for high school program, they found the same pattern as before. The sector effect for academic-program students was smaller than for all students, but an effect was also found for general-program students, which was somewhat larger than the effect for academic-program students.

On one point, at least, there was agreement. Everyone concurred that longitudinal data would be superior to the available cross-sectional data for estimating cognitive growth. When the 1980 data were combined with scores from the spring 1982 follow-up testing, more accurate, if not yet definitive, Catholic-public achievement comparisons would be possible. By then, most of the original sophomores would be seniors, and two sets of scores, obtained two years apart, would be available for each student. Elaborate adjustments for differential dropout rates would no longer be necessary, earlier achievement scores from the same student could be used to control for selection effects, and, because the 1982 seniors would repeat the same achievement tests they had taken two years earlier as sophomores, public-Catholic comparisons would be based on longer tests in reading, vocabulary, and general mathematics, as well as additional tests in writing, science, civics, and advanced mathematics.

In 1984, the second wave of HSB data was ready for analysis. Data had been obtained for fully 90 percent of the students still in their base-year schools, and for nearly 80 percent of those dropouts randomly sampled for inclusion in this first follow-up data collection. Thus, researchers who had performed some of the earlier, cross-sectional analyses were now able to test their original conclusions more rigorously, using the two waves of longitudinal data. Four such reanalyses were reported in three papers given at the IFG Conference *Comparing Public and Private Schools*.

- "Achievement Growth in Public and Catholic Schools," by Thomas Hoffer, Andrew M. Greeley, and James S. Coleman, reports two reanalyses. Coleman and Hoffer replicated their earlier investigations with Kilgore, and Andrew M. Greeley re-examined the findings of his 1982 book, *Catholic High Schools and Minority Students*.

- "School Sector and Cognitive Performance: When is a Little a Little?" by Karl L. Alexander and Aaron M. Pallas, addresses largely the same issues as a 1983 paper these authors published in *Sociology of Education*. Alexander also uses HSB data in a related paper distributed at the conference, "Comparing Public and Private School Effectiveness: Evidence and Issues".

- "Patterns of Academic Achievement in Public and Private Schools: Implications for Public Policy and Future Research," by J. Douglas Willms, extends earlier analyses he reported in a 1984 paper in *Evaluation Review*.

In their earlier work, Hoffer and Coleman concluded that Catholic school superiority was on the order of one grade level. In addition, they found that Catholic schools more nearly approximated the ideal of the common school, reducing disparities between the achievement of the advantaged and disadvantaged. Greeley, whose new analyses appear in the same conference paper, had come to the same conclusions from his work focusing on Black and Hispanic students. Alexander and Pallas, and Willms, were more skeptical. In their earlier analyses, they found somewhat smaller Catholic school effects, and they interpreted these effects as being relatively unimportant.

Better Data, Better Agreement?

In analyzing the longitudinal data to compare public and Catholic sector effects, Hoffer and Coleman, Greeley, Alexander and Pallas, and Willms all use data for the single cohort of students tested as sophomores in 1980 and again as seniors in 1982. The general strategy is

First, and most importantly, there is little support for the notion that cognitive development in Catholic schools significantly outpaces that in public schools between the sophomore and senior years. Our second conclusion is that background characteristics relate to test performance in similar fashion in the public and Catholic sectors. We thus find no support for Coleman, Hoffer and Kilgore's "common school" hypothesis that minority and disadvantaged youngsters are especially well served by private sector schooling....

In our opinion, this average difference of .67 grade levels between public and Catholic schools is quite modest, and certainly far too small to warrant Coleman, Hoffer and Kilgore's indictment of public sector schooling as inferior to that in the Catholic sector....

In reaction to an earlier version of this paper, Christopher Jencks... suggested two possibilities: either the HSB tests aren't sufficiently sensitive to what is taught in school; or, there's not much cognitive growth altogether during the last two years of high school. If the latter were the case, then not only wouldn't it matter which sector one attended, it seemingly wouldn't matter much whether one stayed in school at all!...

and 1.53 items for the Catholic sector. They convert the differential Catholic school gain of .53 item into a grade equivalent, as follows. The public school students gained one item in two years, for a growth rate of .5 item per year. Thus, .5 item represents one grade equivalent. It follows that the .53 additional gain for the Catholic sector represents an advantage of $.53/.5 = 1.1$ grade equivalents growth. In other words, the benefit for measured reading performance of being in a Catholic high school for just two years is equivalent to more than a full year of additional public school instruction.

The estimates of raw score gains obtained by the other authors differ from Hoffer and Coleman's, but if Willms, for example, had obtained the same estimate of .53 additional item gained in the Catholic sector, he would have transformed it not into grade equivalents, but into standard deviation units. The standard deviation of reading test scores for seniors was approximately 4.1 items. Willms would have divided .53 item by 4.1 to obtain an effect size of .13. For a typical public school student, this would amount to a difference of only about five

Cognitive outcomes are only one consideration among many that should enter into an evaluation of what schools and schooling do to youngsters, and even in the cognitive domain we know woefully little regarding the mastery of subject specific skills and knowledge. Moreover, despite there not being much average growth over the high school years, for particular youngsters and even for particular kinds of youngsters, educational interventions can make a considerable difference. Our recent studies on the effectiveness of the so-called "New Basics" curriculum, and on the contribution of differential math and science coursetaking to the shortfall of girls relative to boys on the SAT-M certainly underscore the practical importance of curricular content. All this suggests that the differential experiences which do have an important positive impact must be relatively infrequent and/or available to relatively few students. An authoritative accounting of what sorts of interventions matter most and for what sorts of students their payoffs are greatest comprise an important agenda for future research, but we don't expect that it will have much at all to do with the differential effectiveness of public and private sector schools.

from "School Sector and Cognitive Performance: When is a Little a Little?" by Karl L. Alexander and Aaron M. Pallas, pp. 20-24.

percentile points after two years of instruction.

That the same sector effect could appear so large in one metric and so small in the other is due to the surprisingly small test score gains in both sectors over two years of instruction. Whether the gains are reported in terms of additional items answered correctly or in terms of standard deviation units, the conclusion seems inescapable that either (1) the seven tests, even the so-called curriculum-specific tests, were not especially sensitive to sophomore-to-senior cognitive growth or (2) very little cognitive growth occurred during the last two years of high school, in either sector. Assuming the problem lies with the tests, arguments may be advanced that with more suitable instruments even larger differences would be found, or that with more suitable instruments even smaller differences would be found.

What were the findings? Hoffer and Coleman conclude, "There are strong positive effects of Catholic-sector schools in reading, vocabulary, mathematics, and writing... and weak and statistically insignificant effects in science and civics"

(p. 28). Their tables present the effects on the first four tests as being .8 grade equivalents in each of reading, mathematics, and writing. In all cases, the additional increment in growth for Catholic students is less than one additional item correct over the two-year period. Hoffer and Coleman find the absence of an effect in science plausible. While Catholic school students report taking more advanced mathematics courses than public school students, they do not report taking more science courses. Neither are there likely to be pronounced differences in the amount of civics education taken by students in the two sectors. The large differences they do report in the areas of reading, writing, and vocabulary are more difficult to link directly to differences in coursetaking, unless the Catholic school advantage on these tests is a general effect of offering a college preparatory curriculum to a larger proportion of students.

Concerning the hypothesis that Catholic high schools more nearly approximate the ideal of the common school, educating all students alike regardless of race, ethnicity, or social class, Hoffer and Coleman conclude, "these results are generally supportive of our original conclusion on the 'common school' hypothesis. The differentiating effects of race and ethnicity are clearly less within the Catholic schools than within the public schools. The effect of SES on achievement growth is also lower in Catholic schools, though the Catholic superiority is somewhat less pronounced" (p. 31).

Greeley

How should sophomore test scores be used? Greeley used sophomore test scores to calculate sophomore-to-senior formula score gains on a composite of the five tests showing the largest Catholic school effects. He also used the sophomore formula score composite to control for differences in background characteristics. Greeley described this control as accounting for initial differences in ability, motivation, knowledge, and previous education.

What other characteristics should be controlled? Greeley's background variables included the same socioeconomic status composite used by Coleman and Hoffer, along with race, ethnicity, father's expectation about college attendance, student's present college plans, whether parents were school volunteers, and the number of years the student was in Catholic grammar schools. The logic of his analysis was a little different than that of the other authors. In addition to these con-

trols for student background, Greeley assembled a second set of variables intended to measure school processes. These included student-reported academic track assignment, advanced coursework, disciplinary climate, and hours of homework per week. After controlling for student background and sophomore test performance, Greeley determined how much of the remaining difference between public and Catholic school achievement gains could be explained by those school process variables. He attributed to Catholic schooling only what could be explained by differences in curriculum, discipline, and homework practices.

As discussed above, some critics of the original Coleman, Hoffer and Kilgore analyses would prefer to consider academic track a background characteristic, although Greeley presents tables showing that when SES and sophomore achievement levels are controlled, Catholic school students are still more likely to report being in academic programs. Similar objections might be raised to Greeley's use of the number of specific, advanced courses the student checked off as having taken as a measure of school process. Advanced coursetaking could easily be interpreted as an indicator of student characteristics rather than school policies.

Which scores should be used to represent outcomes? Greeley first presented unadjusted sophomore-to-senior formula score gains by sector for all seven of the available achievement tests. Next, because the science and civics tests did not show a Catholic sector advantage in Hoffer and Coleman's analyses, Greeley set aside these two tests, and summed formula scores on the remaining five instruments to form a single score. His major analyses were reported only for this composite. Like Hoffer and Coleman, Greeley made no direct use of distinction between the general ability measures and the curriculum-specific measures.

In what units should effects be reported and interpreted? While Greeley concurred in the general conclusions of the Hoffer, Greeley, and Coleman paper, the analyses he conducted independent of Hoffer and Coleman were reported only in terms of additional items answered correctly. Greeley did not discuss extensively the question of whether the estimated Catholic sector advantage was large or small. He has contended that, given the lower per-pupil costs of Catholic education and earlier prevailing assumptions that Catholic schooling was inferior, the finding of any advantage, or

even of equality of outcomes, is important in itself.

What were the findings? Greeley reported an unadjusted composite Catholic sector advantage of 2.27 items for the entire sample, and generally larger advantages for minority, low scoring, and low SES subsamples. The largest difference was 3.94 items for Black and Hispanic students. When background variables were controlled, the estimated Catholic school effects were about half as large. Greeley controlled the four school process variables successively. As each additional variable was controlled, the unexplained difference between average achievement scores for the two sectors was reduced. Adjustment for academic track assignment and advanced coursework reduced the remaining unexplained portion of the Catholic sector advantage to .04, after which the introduction of perceived disciplinary climate and of homework caused the estimate to fall to -.49 item. Greeley did not discuss in any detail the explanation for this negative value.

Alexander and Pallas

How should sophomore test scores be used? Like Hoffer and Coleman, Alexander and Pallas controlled senior scores on each test for differences in sophomore scores on the same instrument. Like Greeley, they analysed formula scores rather than raw scores. Alexander and Pallas departed from the procedures of the other authors, however, in one important respect. In controlling for sophomore test performance, they employed a statistical procedure known as *correction for attenuation*, or *disattenuation*. Without this correction, control for sophomore scores adjusts for differences in students' observed performance on the earlier tests. With the correction, it is possible in theory to control for differences in the scores sophomores would have earned on idealized, error-free tests, unaffected by luck or carelessness. In practice, this promise may or may not be realized; the technique is fraught with perils.

In order to correct for attenuation, estimates are required of each test's *reliability*. This is a coefficient that tells how much random error is present in student scores on the test. If the correction for attenuation employs reliability estimates that are too low, an overcorrection for random error will result, making the relation between sophomore and senior test scores appear stronger than it really is. Controlling for sophomore test scores will then over-adjust for selection effects, which could result in too small an estimate of the Catholic school advantage.

Alexander and Pallas used reliability estimates from a field study of the sophomore test battery conducted by the Educational Testing Service, which developed the original tests. While there is no reason to doubt the accuracy of these estimates, they were not entirely appropriate for Alexander and Pallas' purposes. There are at least two reasons these reliability estimates may have been too small, ultimately resulting in underestimates of the Catholic school advantage. First, the reliabilities were for raw scores, but they were applied to formula scores, which often are found to have slightly higher reliabilities than raw scores. Second, the reliability estimates were of a type that would be appropriate for disattenuating the relationship between two different tests composed of the same kind of items, but not identical items. In the HSB study, the identical tests were given to sophomores and again to seniors two years later. Alexander and Pallas' use of these reliabilities requires the assumption that students' responses to the *same question*, asked on two occasions two years apart, are no more closely related than their responses to two different questions from the same test, asked on two occasions two years apart. The biases introduced in using these reliability estimates with sophomore and senior formula scores on the identical test are probably small, but might be substantial. This question cannot be answered from the available data.

What other characteristics should be controlled? Like Hoffer and Coleman, Alexander and Pallas controlled for student socioeconomic status, race and ethnicity, sex, and region of the country. They did not control for college plans, parental expectations about college attendance, or family size and structure. Taken by itself, this relatively sparse set of control variables would lead to smaller selection effects adjustments than those of either Coleman and Hoffer, or Greeley, and consequently, to a larger estimate of Catholic sector effects. Their correction for attenuation, however, so greatly increased the size of the adjustment for initial test performance levels that they actually obtained smaller sector effect estimates than the other authors.

Which scores should be used to represent outcomes? Alexander and Pallas combined the general and advanced mathematics tests to obtain a single mathematics score. They also created an additional composite by adding the other two general ability tests, reading and vocabulary, to the score in mathematics. In addition to the combined mathematics score, reading, vocabulary, and the composite,

they analyzed each of science, writing, and civics, for a total of seven scores.

In what units should effects be reported and interpreted? Effects are presented first in units of additional items answered correctly, then, following Hoffer and Coleman, in grade equivalents, and finally, in standard deviation units. In addition, Alexander and Pallas express the differences in terms of the approximate public school percentile rank of adjusted Catholic school median, as was illustrated above in converting an effect size of .13 standard deviation to a difference of five percentile points.

What were the findings? In formula score units, Catholic sector advantages on all the individual tests except civics are between .125 items (science) and .707 items (vocabulary). Civics shows a public sector advantage of .029 item, and for the general abilities composite, the Catholic sector advantage is 1.649 items. Excluding civics, these differences correspond to an average of about two-thirds of a year's growth, and range from .03 to .12 standard deviation units, which Alexander and Pallas judge to be generally too small to be considered of practical importance. They state, "On the separate tests, the improvements would be two percentile points in math and reading and five points in vocabulary, and gains on the subject specific tests would be even more modest. What then of Coleman, Hoffer and Kilgore's claim that private sector schools are educationally superior to public schools? If trivial advantage is what they meant by such a claim, then we suppose we would have to agree. But judged against reasonable benchmarks, there is little basis for such a conclusion" (p. 14).

Willms

How should sophomore test scores be used? Willms explicitly distinguished the general ability tests from the curriculum-specific tests in his analytic strategy. The sophomore score on the same test was used to control for initial achievement differences, and sophomore scores in reading, vocabulary, and basic mathematics were used to adjust for initial differences in general ability, or learning aptitude. For example, the senior science score was adjusted for sophomore science score differences, and also for initial levels of reading, vocabulary, and general mathematics. Senior scores in reading, in vocabulary, and in general mathematics were each adjusted for sophomore scores on the same test, and for the two remaining general ability measures.

What other characteristics should be controlled? In earlier work, Willms systematically explored some of the methodological controversies surrounding Coleman, Hoffer, and Kilgore's original report. On the basis of his statistical comparison of the sets of background variables other researchers had used to control for selection effects, Willms selected a subset of the most important control variables, which he referred to as his *reduced model*. Because he used test scores to control for initial differences in both aptitude and achievement, Willms required only additional background controls for differences in students' out-of-school environments during the last two years of high school. For this purpose, his reduced model included SES, race, ethnicity, sex, presence of both parents in the home, and the student's report of being handicapped versus not handicapped. Willms indicates that more controls might be required, in which case his reduced model would under-correct for selection effects. For this reason, he states that his Catholic sector effect estimates should be viewed as upper bounds to the true effects.

Which scores should be used to represent outcomes? Willms initially examined just the four curriculum-specific tests, on the

Overall, the evidence of this study suggests there is no pervasive Catholic schooling effect in academic achievement for the average student. . . .

I must qualify these findings by stating that none of the HSB tests appear to be adequate measures of academic growth during the intervention period. During the planning stages of the HSB study, members of the planning committee suggested that the measures of basic cognitive skills were not adequate to assess patterns of change in achievement over time, and recommended the inclusion of tests that adequately evaluated material taught during the last two years of high school. Following their recommendation, three tests of general cognitive skills were dropped from the test battery to make room for the curricular-specific tests of science, mathematics, writing, and civics education. The present analyses of sophomore-to-senior gains on these tests, however, suggest that they fail to be adequate measures of academic growth for at least half of the students in the HSB sample. Therefore, although the findings indicate there is no pervasive private schooling effect, we can-

not be certain that the tests were sensitive enough to detect differences between public and private schools in their effects on students' achievement. If the tests had measured more advanced skills in biology, physics, chemistry, mathematics, and English, then we might have observed a significant private schooling effect. At present, this must remain an open question.

In what units should effects be reported and interpreted? Like Alexander and Pallas, Willms strongly prefers standard deviation units for reporting and discussing his findings. In support of this choice, he argues that expressing effects in standard deviation units facilitates comparison to the findings of other studies and to the magnitude of effects of other interventions. He also prefers standard deviation units because stating effects in terms of grade equivalents for years of schooling seems to imply that achievement growth is entirely due to the effects of schooling. When growth is expressed in standard deviation units, there is no implication that out-of-school experience is not involved.

What are the findings? Using a conservative level of statistical significance (three

The present study, therefore, tells us very little about how to improve schools in either the public or private sector. To some extent, the failure of the tests to adequately measure academic growth might have been expected: it is very difficult to design a test that can capture the effects of schooling for all schools in the US, given their great diversity in clientele, goals, and curricula. I am therefore pessimistic about bigger and better national studies to answer policy questions concerning the effects of different kinds of schools serving different types of clientele.

from "Patterns of Academic Achievement in Public and Private Schools: Implications for Public Policy and Future Research" by J. Douglas Willms, pp. 19-22.

standard errors), Willms reported that the Catholic sector advantage was statistically different from zero only for the writing, general mathematics, and vocabulary tests. He states, "The overall findings... suggest that there is no substantial private schooling effect on the curricular-specific tests (the largest effect size was seven percent of a standard deviation for the writing test), but small, statistically significant effects of about 10 percent of a standard deviation on two of the three tests measuring basic academic skills. ... The findings are perplexing because if private schools do produce better academic outcomes one would expect larger observed effects on the curricular-specific tests than on the tests of basic skills. The results raise a fundamental question concerning the power of the present research design to detect differences between public and private schools in their academic growth" (pp. 9-10).

Willms next examines the overall sophomore-to-senior growth for both sectors on these tests, and concludes that overall, the tests are fairly insensitive to instructional effects and as a result, "a 'months-of-schooling' standardization dramatically overstates any observed private schooling effects" (p. 14). In summary, Willms concludes that there is no pervasive Catholic schooling effect in academic achievement for the average student. The largest effect size Willms found was .112 standard deviation, for vocabulary. Across all the tests, he found an average effect of .012 standard deviation for the average U.S. child, and .033 standard deviation for low-SES and minority students. In comparison to the effects reported in the literature for other kinds of educational interventions, Willms calls these effects trivial and inconsequential. He qualifies these conclusions, however, with the observation that none of the available tests appears to be an adequate measure of academic growth.

Conclusion

It should come as no surprise that better data have yet to bring consensus on the implications for public policy of the HSB public-Catholic comparisons. The availability of longitudinal data has brought closer agreement on the size of the Catholic sector advantage, and many

of the controversies over methodology have been resolved simply because different investigators have not had to make so many assumptions. But the controversy is really not over the size of the effects. Indeed, even with the original cross-sectional data, agreement on the absolute magnitude of Catholic school effects was actually quite close. The real controversy has been, and continues to be, over the interpretation of these effects as large or small and over the implications drawn for public policy. This is a debate that data alone cannot resolve.

One reason that Hoffer, Greeley, and Coleman consider the effect they estimate to be large is because it occurs over a period of just two years. They argue that the cumulative effect of such a differential growth rate across more years of schooling would be even more substantial. Willms, on the other hand, uses an entirely different standard of comparison. He has compared the effects associated with Catholic sector school attendance to those found for other kinds of educational interventions such as peer and cross-age remedial tutoring, new science and math curricula, or certain instructional variables, all of which have been reported to yield effects greater by a factor of ten or more than the effect of Catholic schools.

One might be led to conclude that better data have resolved nothing. The earlier conclusions and interpretations of these authors represented the range of positions taken by scholars who examined the cross-sectional data base, and in reanalyzing the longitudinal data, all seem to have found further support for their original positions. Nonetheless, it is unduly pessimistic to conclude that nothing has been learned; more is known now than before. Hardly anyone, having reviewed these results, would expect new data or further analyses to reveal dramatic differences in cognitive outcomes for the same kinds of students in public versus Catholic high schools. On the other hand, small, systematic differences have been found, and there is some evidence that they can be linked to course-taking patterns, track assignment, and perhaps, discipline and amount of homework in different high schools. These findings were obtained in the course of examining differences between

the public and Catholic sectors, but they have application at the level of schools, classrooms, and individual students. They are findings that can be studied further in other contexts, and that can be acted upon without any massive restructuring of the American educational system.

Even on the question of the size and importance of the Catholic sector effect, better agreement may yet come with better data. A striking and disturbing finding of all these analyses is the very small magnitude of the test score improvements from spring of the sophomore year in high school to the spring of the senior year. Without any statistical adjustments at all, and ignoring, for the moment, the distinction between Catholic and public high schools, Willms calculated that the growth per year was only .06 standard deviation in advanced mathematics, .10 standard deviation in science, .17 standard deviation in writing, and .20 standard deviation in civics. This is no more growth than was observed for the three general ability tests. On all seven tests, annual growth was a fraction of an item. When this growth is expressed in terms of the change per year in the proportion correct, it ranges from 1.4 percent for advanced mathematics to 4.2 percent for civics. Are we to believe that two years of high school instruction increases by only 2.8 percent the probability that a typical student can answer a typical advanced mathematics item correctly? An effect this small is virtually undetectable at the level of individual students. Either there were serious problems with the HSB test battery, or there are serious problems in both public and Catholic high schools.

One is reminded of the painful conclusions of the first Coleman report in 1966, so often construed as showing that quality of schooling really did not make much of a difference. Nearly 20 years later, the problems of building tests and mounting studies to quantify the effects of different kinds of schooling may still await solution. Better data, and especially data from better tests, are exactly what are called for. This is not the first time that good research has raised more questions than it has answered. As old but wise researchers have often found, "The larger the circle of light, the greater the perimeter of darkness." ■

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PROMOTING EFFECTIVE SCHOOLS Public & Private Lessons

by Joan E. Talbert

The current reform movement in U.S. public education is bolstered by claims that private schools outdo the public schools. In the debate over tuition tax credits, documents such as the highly publicized report by Coleman, Hoffer and Kilgore credit the private sector with superior academic productivity, higher quality school life, and more effective administration. Apart from offering a rationale for increased public support of private education, these assessments call for an upgrading of public schools. They further suggest that the private schools offer a model of effective school organization, with emphasis on traditional curricula and management roles.

A growing research literature challenges the claim that private schools are academically superior to public schools, after student mix and curricula placements are adequately taken into account, but tends to support the view that private schools foster better social systems. Significantly, there are no direct assessments of private school administrative strategies or their effectiveness in the public sector. Proposals for modelling private school policy and management thus can be evaluated only indirectly at this time.

A vast research literature on effective public schools and organizational analyses of differences between the public and private sectors can offer perspective on a few key issues. What features of school organizations have been identified as effective among public schools? Are they facilitated or inhibited by basic organizational conditions of public and private

schools? What effective school features are least constrained in the public sector, and can they be promoted by organizing strategies common among private schools?

Effective Public Schools

Numerous studies have identified features of public school programs, administration and social systems that distinguish academically successful schools. Different kinds of comparisons contribute to the line of research: contrasts between samples of schools particularly high and low on expected achievement levels; comparisons among schools serving low socioeconomic populations; multivariate analyses for school samples representing the range of student achievement levels and socioeconomic populations. Each research strategy has methodological weaknesses, but jointly they provide a reasonable base for identifying a set of features typical among academically successful public schools. The literature on program implementation and research on school social environments also help to define a core of effective school features not limited to academic productivity.

Features of school governance and culture deemed "effective" by a number of researchers include:

School governance

- Clear goals or priorities, often stated as emphasis on basic academic skills.
- Strong administrative leadership, sometimes specified as instructional leadership.
- Coordination of resources and instructional activities.
- School administrative autonomy, sometimes including district support.
- Parental contact and involvement.
- Joint planning by staff.

- Staff development on inservice training.
- Clear principles and guidelines for student behavior.
- Frequent review of student progress.
- Schoolwide recognition of student success.

School culture

- A consensus on goals among the staff.
- Sense of community, including staff-student rapport.
- High expectations for student success.
- Discipline and order.

Some of these features associated with effective public schools have been highlighted as distinguishing private from public schools—mainly those emphasizing academic skills and discipline and order. Selective reference to the literature clearly supports a traditional view of effective schools. The literature on organizational conditions of the sectors suggests that these features are among those most constrained in the public sector.

Public and Private School Organization

There is a notable lack of research comparing school organization across sectors. This lack partly accounts for the impact of claims that private schools are better run than public schools. However, in the wake of controversy surrounding such claims, numerous critics have enumerated unique organizational advantages of private schools, and studies across the two sectors have been conducted. In spite of the limited data and range of analysis, it is possible to identify organizational conditions that distinguish the school sectors, that are relatively stable in the context of existing laws and fiscal arrangements, and that influence school

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capacities to be effective as educational institutions.

First, the *selectivity* of private school students is the most often noted, and perhaps the most important, organizational difference between the private and public school sectors. Private schools' selective recruitment and retention of students, teachers and parents enables them to forge value communities and maintain acceptable levels of academic performance. This condition of private school organization facilitates goal convergence among the staff, teacher collegiality, high expectations for student success, discipline and order, as well as a sense of community. All of these contribute to school effectiveness.

Public schools' rule of selection by residence yields widely varying mixes of student aptitudes, values and educational goals. Further, public schools are more or less open to the proliferation of laws and centrally controlled programs aimed at special student populations.

Second, the complex *organizational environments* that evolve among schools open to these trends become manifest internally as fragmented programs, reduced school autonomy from higher administrative levels, and extra demands on administrators' time. However, the condition is less extensive and intensive in the private sector.

In the aggregate, public schools are constrained from achieving certain features of effective schools such as administrative autonomy, resource and program coordination, emphasis on academic subjects, and goal clarity. Teacher collegiality and goal coherence may also be inhibited as staff populations are differentiated and specialists are rotated among schools with complex program structures.

Third, the *authority principles* recognized by school constituencies appear to define and constrain school organizational patterns within school sectors. The rational-legal model of organization and authority governs public schools, while private schools either embrace the traditional model established in religious organizations or follow a market model, offering alternatives to the dominant norms and hierarchical organization of established school sectors. My analysis of data for the IFG sample of Bay Area schools reveals common organizational tendencies among schools identified

according to these different types of authority, with independent religious schools showing more similarity to parochial schools than to nonreligious private schools in their program and administration.

Some organizational contrasts among school sectors run closely parallel to categories in the effective schools literature:

- Religious schools report relatively high emphasis on basic academic skills and moral/ethical development (suggesting goal clarity or uniformity), student discipline and teacher commitment (suggesting discipline and order, clear guidelines for student behavior, and staff goal convergence), and autonomy of local school administrators in making decisions (perhaps suggesting an available model of strong leadership).

- Nonreligious private schools report relatively high emphasis on "deviant" educational goals, such as development of self-esteem and social/cultural awareness (suggesting goal clarity, or specificity), community support, and shared authority with parents in making decisions (suggesting parent contact and involvement).

The organizational tendencies distinguishing the public sector do not appear conducive to any of the effective schools features. Rational-legal norms and structures seem to constrain public schools from achieving the desirable program, cultural, and administrative conditions facilitated by organizing models in the private sector without offering alternative advantages. By implication, public schools will, on average, appear below private schools on an organizational index of school effectiveness—unless desirable features not associated with sector conditions are particularly critical to establishing effective school environments.

Importantly, the feature of strong administrative leadership (as well as recognition of student academic success, frequent review of student progress, and joint planning by the staff) appears equally attainable across school sectors. This variable may well be more critical among public schools than among private schools, where established structures may substitute for strong leadership. Apart from this possibility, strong school leadership is likely to entail different roles in the public, religious and nonreligious private sectors, given their

different authority principles and other basic conditions of school organization.

Implications for School Policy

Policy and administrative guidelines aiming to enhance school effectiveness should attend to organizational differences among U.S. schools. The fact that schools in the private sector may be generally more successful on various criteria of school effectiveness does not mean that they should, or can, be taken as models for upgrading the public schools.

First, segments of the private school sector appear to use alternative organizational strategies to facilitate academic performance and desirable school climates. Religious and nonreligious schools relate to institutional environments with distinct norms, values and traditions that direct and constrain school organization. There is no single recipe for school success to be found in the private sector.

Second, public schools are constrained by organizational norms and structures from adopting central features of the different organizing models found in the private sector. Even as norms have shifted to allow for student and teacher selection by public schools, the option is open only to schools in districts large enough to support more models of school choice.

Third, public primary and secondary schools vary widely in size (urban/suburban/rural), student and staff stability, traditions, administrative context (district and state organization). It is not clear whether and how these variables condition the effects of particular approaches to school organization and management. The effective schools literature documents some effects—e.g., top priority on discipline appears productive in low-SES (socioeconomic status) but not high-SES schools; administrative involvement in instruction appears productive in schools with complex teaching models but not in others; extensive school policy appears conducive to morale in small schools but to have an opposite effect in large, complex schools. Many researchers studying school effectiveness emphasize the unique and organic combinations of structures and processes found among effective schools. In short, any one model for organizing effective schools will not be applicable across the diverse population of U.S. public schools. ■

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AUTONOMY, AUTHORITY & ADMINISTRATION Differences in School Organizations

by W. Richard Scott & John W. Meyer

There is little doubt that decision making regarding public education has become more centralized over the past few decades. Throughout most of their history, U.S. schools have been governed by local community authorities and were most responsive to local clientele and interest groups. While states vary greatly in how they exercise their constitutionally defined role of overseeing schools, most state departments of education have until quite recently been small, weak and ineffectual. Until the 1960s, the federal government had virtually no impact on most aspects of elementary and secondary education.

This situation changed dramatically in 1965 with the passage of the Elementary and Secondary Education Act. Aimed primarily at achieving greater equity for certain groups such as the economically disadvantaged, this legislation introduced a strong federal voice into educational affairs. The federal presence stimulated and strengthened state education agencies, delegating power to supervise the implementation of some of the federal programs while also providing funds to augment staff and carry out the law. New administrative units emerged, expanding the public educational sector and shifting some types of decisions from the local community to the state or national level. In a word, the governance of schooling has tended to become more centralized.

Up to the present, however, the authority of local education agencies and the influence of local interests have not

been displaced by centralization. They have only been supplemented by the growth of power at the state and national levels. The change has merely layered authorities over one another, each claiming the prerogative of making some types of educational decisions. The growth of educational authority at the state and federal levels has not led to a monolithic concentration of authority at higher levels. Instead it has grown up side by side with the establishment of independent authorities, separate responsibilities, and overlapping jurisdictions. Because of these trends, the environment of public schooling as an institution has become more complex and ambiguous in recent decades.

Public schooling has also become more prone to conflict. One reason is that educational authorities at different levels of governance often find themselves working at cross purposes. Thus, educational authority in the public sector is fragmented. Authority may be centralized in certain respects, but it is not integrated or coordinated at any given level of educational governance. With fragmented authorities at each level — national, state and local — along with the lack of integration across levels, the resulting system is one of considerable disorder.

Private School Environment

A comparison between these trends in the public sector and those that may be influencing the environment of private schools is difficult for three reasons. First, much less information is available about private schooling than public education. A second barrier to understanding is the great variety of private schools. Third, private schools receive varying levels of public support and are subject to varying degrees of public regulation, so the distinction between the environments of

public and private schools is not sharply defined.

Based upon data from more than a decade ago, it has been estimated that, on the average, nonpublic schools receive approximately 26 percent of their total income from government. About half of this income is derived from indirect tax deductions or exemptions, the other half from direct program expenditures. A small number of private schools receive direct categorical aid, virtually all of which is targeted for certain student populations. To the extent that variety, change and a blurring of boundaries between public and private systems all contribute to the complexity of the private sector, these characteristics in themselves offer useful points of comparison with recent trends in the public sector. To begin with, private schools vary in the extent to which decisionmaking is centralized. Some, like Catholic and Lutheran schools, operate predominantly within hierarchical systems, while others belong to loosely organized federations, such as the National Association of Independent Schools. Still others are unattached to any larger system or organization.

Despite the relative autonomy of many of them, private schools still may experience some of the overlapping authorities and jurisdictions that characterize the public sector, since these schools are subject to control exercised by both local and state authorities. Although there is great variation across the 50 states, private schools feel the impact of state regulation in such areas as minimum educational standards, attendance reporting, licensure and teacher certification. Other agencies regulate private schools as a business subject to state and local building, fire, health, sanitation, child welfare, and zoning codes. Private schools apply-

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ing and qualifying for more direct forms of public aid, such as textbook or compensatory education programs, are subject to review by public authorities. Government defines these programs as benefiting targeted student populations. The great majority of such targeted funding is not administered by the private schools but by public agencies, often the local school district.

In general, the extent of competing authority and overlapping jurisdiction experienced by private schools is low compared with public schools. Similarly, private schools appear to be confronted by less fragmented environments than their public counterparts. Sources of funds are fewer and authority over programs is more likely to be located at the school level. What variation exists is likely to be associated with the degree to which they receive public funds.

The Study

What are the consequences of these contrasting environments for the structure and operation of schools? Generally speaking, it is expected that organizations operating in more complex and conflicted environments will exhibit greater administrative complexity and reduced program coherence.

The primary data used for testing this hypothesis come from a survey of public and private schools in the six-county San Francisco Bay Area. The survey took place in 1981, carried out by staff of the Institute for Research on Educational Finance and Governance (IFG), Stanford University. Surveys were mailed to a sample of public and private schools and public school districts, with instructions that the questionnaires were to be filled out by administrators. Data were obtained from 130 public schools, 121 private schools and 49 school districts. The response rate was a disappointing 30 percent of the original sample, but this was sufficient to support the types of analyses planned. In addition, brief interviews were conducted with county educational officials and Catholic diocesan administrators. These survey data are supplemented by results from previous studies conducted at IFG.

Results

We found that districts receiving more

types of federal and state funds had larger numbers of administrators after taking into account the effects of size. The numbers of professionals at the district level were not related to the number of funding programs for public schools but were positively related to the number of programs for private schools (because public districts were authorized to administer public programs for private schools within their jurisdiction). The numbers of classified staff at the district level were affected only by the size of the district, not by the number of public funding programs.

The only administrative layer within the private sector at all comparable to the district level in public schools is the diocesan structure within the Catholic parochial school system. Interviews with administrators located in these offices revealed the presence of a very small administrative staff. In the largest of the three dioceses studied, seven administrators and two clerical persons administered a system containing 94 schools. Given the size of these systems, it is not surprising that the administrators perform mostly staff functions, such as collecting system-wide data on student performances and teacher qualifications, and conducting training workshops. Compared with the public system, private schools are much less likely to be organized at a regional or district level. The ones that are exhibit only small and rudimentary administrative staffs at these levels.

Shifting to the school level, schools were categorized into seven types: three classes of elementary schools—public, Catholic and private; public middle schools; and three classes of secondary schools—public, Catholic and private. In general, private schools exhibited higher staffing ratios, both of teachers to students and of administrators to students, than public schools. Schools participating in more public programs had larger numbers of administrators, though these results were strong only for public middle and secondary schools and for Catholic elementary schools. Public and Catholic, but not private, schools that participated in a larger number of programs employed higher proportions of accountants and bookkeepers on their staffs.

The findings suggest that environmental fragmentation tends to generate administrative complexity at both the district and the school levels of the public system. This conclusion reinforces the image that both district offices and individual schools are parts of a loosely coupled system and respond somewhat independently to the pressures of a complex and conflicted environment.

Evidence regarding the effect of environmental conditions on school program was obtained by asking school officials to describe the importance of various goals in their programs and by examining the extent to which schools reported having control over their policy decisions. As expected, officials in public schools were more likely to subscribe to somewhat contradictory programs—for example, emphasizing both college preparation and vocational training—and were more likely to report more influence over policies resting in external agencies than did Catholic or private school respondents.

In sum, even though their internal tasks are basically similar, public and private schools operate in different institutional environments. Public schooling has a much more elaborate organizational structure than does private schooling. While Catholic and private schools have higher ratios of building level administrators to students, above this level they exhibit little administrative structure. Public schooling has complex and expanding structures above the school level. And it is exactly these organizational levels that the environmental controls from state and national levels of authority have acted to foster in recent decades. The complex environment of funding, programs and requirements in which public schooling is immersed creates pressures that generate much administrative expansion.

These pressures also affect internal programs of schools. The involvement of public schools in an environment with diverse pressures from so many constituencies and administrative layers may provide many important resources for the schools, but the complexity and inconsistency of that environment make them less able to exercise control over their policy goals and forces them to operate less coherent programs. ■

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WHO OPERATES PRIVATE SCHOOLS?

If the private sector grows at its present rate, by 1990 it will enroll 15% of all elementary and secondary school students. It will become more difficult for elected officials in Washington D.C. and the state capitals to ignore the needs of private schools.

by Bruce S. Cooper

Private education in the United States has become a topic of great interest and controversy. Until recently, children attended private school almost unnoticed, but today these schools are growing so rapidly in number and enrollment that they are attracting public attention. Patterns of private school enrollment may be useful barometers of family choice in education, national priorities, and existing problems in the public schools. Yet, for all this new concern, little is known about the shifting make-up of the private educational sector: its size, composition, location, and implications.

Data for this analysis combine information from the National Center for Education Statistics (NCES) and from national associations of private schools. It also includes information gathered from a door-to-door exploration in 22 counties in states including: California, Illinois, Iowa, Louisiana, Massachusetts, Minnesota, New Jersey, Tennessee, Texas and Washington. Conducted in 1981, the door-to-door survey turned up many unknown, uncounted, and quiet little schools—often attached to Evangelical Christian churches or located in private homes.

These data were analyzed according to type of school, then placed into a national framework to determine larger trends in the private sector of education. Data on the 20 types of private schools give some sense of the diversity and complexity of the private sector:

Roman Catholic Schools By far the largest group, enrollment in these

schools has declined since the late 1960s from a high of 5.6 million students in 1964 to a low of 2.97 million in 1984 (a loss of 47 percent in nearly two decades). This decline is leveling off: there were only 31 fewer schools in 1983-84 than the previous year, and only 58,000 fewer students enrolled.

Lutheran Schools

American Lutheran Church Until recently, this branch of the Lutheran Church had only moderate interest in parochial school education. However, in the last 18 years its involvement has quadrupled, from 8,795 pupils in 1965 to over 31,000 in 1983 (+256 percent), reflecting a concern within the more progressive wing of the church.

Missouri Synod By far the largest of the Lutheran school groups, this synod has the longest history of involvement in education. Between 1965 and 1983, the number of students increased by 15 percent, from 172,966 to 198,061. So while the Catholic schools declined, Missouri Synod, the second largest of the traditional Christian school movements, grew modestly.

Evangelical Lutheran This group has only recently become involved with day schools, currently operating 57 schools with 5,144 students.

Wisconsin Evangelical This group, like the Missouri Synod, is quite traditional and has long operated its own parochial schools. Enrollments have grown by 30 percent in 18 years, from about 27,000 to 35,500 pupils.

Overall, the four groups of the Lutheran Church have enjoyed steady if not outstanding growth. The Lutheran schools together went from 208,209 pupils to 280,529 in 18 years, an overall growth of 35 percent.

Jewish Schools

Orthodox Jewish Day Schools Oldest

and largest among Jewish weekday schools, those run by the various Orthodox communities (also called *yeshivot*) increased by 55 percent in number of schools—from 321 in 1965 to 497 in 1983; in pupils served, they increased from 68,800 to 86,321, or 55 percent. Despite a declining student base, a greater percentage of Jewish children attend Orthodox day schools now than ever before.

Conservative Jewish Day Schools Often called Solomon Schechter Schools after the late president of the Jewish Theological Seminary, these are a new and vital segment of the Jewish day school movement. They increased the number of students served by 254 percent—from 3,489 to over 12,000—between 1965 and 1983.

Reform Jewish Day Schools Still a fledgling movement, there are only nine liberal Jewish day schools in the United States. Enrolling about 1,500 students, they indicate a small but important change among the most assimilated of American Jews.

Jewish schools have jumped in number from 345 in 1965 to 572 in 1983-84, an increase of 66 percent. The number of pupils enrolled increased from about 73,000 to 100,000, despite a decline in the number of Jewish children nationwide.

Seventh Day Adventist Schools With churches and missions in 190 nations, the Seventh Day Adventist Church has long operated both day and boarding schools. Strong growth in the church has meant steady increases in the number of schools, from 884 to 1,324, an increase of 49 percent in 18 years; the number of pupils grew from 64,252 in 1965 to 81,507 in 1983, an increase of 27 percent.

Independent Schools Affiliated with the National Association of Independent Schools, these schools include some of the nation's most elite and oldest board-

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ing and "country day" schools. With a strong new interest in academic quality, these schools have prospered. There has been a 69 percent increase in pupils, from 199,329 to 336,797 in 18 years, while the number of schools has climbed from 697 to 873, an increase of 25 percent.

Episcopal Schools Old-style Episcopal schools were started by Episcopal groups but operated independently, while the more active new type follow the Roman Catholic model, with local churches, clergy, and communities supporting them. Both the old and new types have grown by 52 percent between 1965 and 1983, from 347 to 527 schools; enrollments increased from about 59,000 to 78,000 or 32 percent.

Greek Orthodox Schools With the increase in the American Greek Orthodox community and churches, schools too have grown, from only 13 in 1965, with 2,205 pupils altogether, to 23 schools and 7,590 students. There has been a 24 percent increase in students and a 77 percent increase in number of schools.

Friends (Quaker) Schools Known for their quality, tolerance and progressivism, schools run by the Society of Friends are among the oldest in this country with their first school being established in 1689. They also have the most diverse enrollment with only seven percent of their students being Quakers. Enrollment went up by 24 percent, from 10,878 to 13,853, between 1965 and 1983. The number of schools grew by 77 percent, from 36 to 53, in the same period of time.

Mennonite Schools Another of the "peace churches," the early Anabaptist schools dropped in number, primarily because the Amish schools are no longer calculated in this group. Enrollments declined 18 percent, and schools declined in number by 59 percent between 1965 and 1983. Between 1970 and 1984, however, there has been steady growth in enrollments, from 7,368 to 10,906.

Special Education Schools Changes in federal laws have increased the demand for special private schools for children with cognitive, physical, and emotional handicaps. With public support to families, many of these special education schools are privately run but publicly financed under P.L. 94-142 and other laws. Longitudinal data are not available, though it is known that some 2,600 of these schools currently serve almost 300,000 students from the ages of 2 through 21.

Alternative Schools Progressive and

"free" schools were popular in the 1960s and early 1970s when "open," child-centered classrooms were sought. Many of these schools closed, joined the public system or became more traditional. About 128 of them still survive, according to the Alternative Schools Network.

Military Academies The Vietnam War and a general lack of interest in military training weakened the military school in the U.S. This period may have passed, and about 36 such schools have survived, with 9,792 students enrolled in 1983.

Calvinist Schools Members of Christian Schools International, the followers of John Calvin, who are members of the Reform Christian Churches, have expanded their education system from 5,240 pupils in 200 schools in 1965 to 382 schools and nearly 10,000 pupils in 1983.

Evangelical Christian Schools Opening at the rate of one per day, these fundamentalist schools constitute perhaps the most dynamic of all private school trends. Started by small churches of "born-again Christians," the schools are small, decentralized and totally autonomous. In 1965 it was estimated that about 1,500 schools had about 100,000 students. By 1983, nearly 11,000 such schools, with an enrollment of 912,985 were found. These schools are typically small, with about 85 children, encompassing kindergarten through 12th grade. They make use of programmed texts from Accelerated Christian Education (ACE), a firm that writes a wide range of Christian curricula for these schools. Further, these schools are found in many areas, town and country, bringing private schools into the hinterlands where only public schools were previously found.

Assembly of God Schools A sect of Evangelical Protestants, this group now has about 200 schools and 10,212 pupils, according to surveys by NCES.

Broader Trends

What does this all mean? What patterns, trends, and directions is this all taking?

● *From Catholic to Diverse* It seems clear that the private school sector has been redefined. What was previously a Catholic, ethnic, and immigrant phenomenon, with nine out of ten private school students enrolled in Catholic schools in 1960, has now become diverse, Protestant, Jewish and Catholic. The mix of pri-

ivate schools creates a panoply of religious, social, ethnic, and class groups, all finding something of value in the private sector. Hence, one can no longer read "Roman Catholic" when one hears "private." Of course, Roman Catholic enrollments still dominate the private sector with 56 percent or 2.9 million students in 1985.

● *Geographic Spread of Private Schools*

Private schools are no longer located primarily in the ethnic centers of the East and Great Lakes regions. Surveying private schools by location shows Christian academies to be in small inland towns where no one had even heard of private education 20 years ago. There is hardly a center of 10,000 people anywhere in the U.S.A. where one cannot find some kind of private school. They have become mainstream, Southern, Sun Belt and down home.

● *From Decline to Growth* There can be little doubt that the diversification and expansion of private education in the U.S. signals a change. The non-Catholic private sector grew by over 87 percent in the last 15 years, with an overall enrollment jump from 795,453 pupils to 2.2 million in 1983, an increase of 179 percent. This growth shows a vigor at the local level, since many or most of these schools are the result of grassroots community and family effort, not "top-down" work of national or regional associations. Many families want these schools and are willing to put out the effort, time and money to establish and support them.

This new-found diversity means many more families have local options for educating their children, religious, social, and academic, and families will pay for those things if the local public schools cannot supply them. Furthermore, if the private sector grows at its present rate, by 1990 it will enroll 15 percent of all elementary and secondary school students. It will become more difficult for elected officials in Washington D.C. and the state capitals to ignore the needs of private schools. Already, private schools are testing the ability of state education departments to regulate schools in their jurisdictions. Can a school fulfill all the state's requirements for curriculum, certification of teachers, program and facilities and still be true to its religious, academic, or cultural mission? Some private schoolers answer in the negative. As private schools gain political clout and go to court, the law may be changed or reinterpreted to accommodate the needs of these schools. ■

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BEYOND INFORMATION AND DATA

There appear now to be fewer reasons for disagreement on the facts of private school participation in the United States than on what to make of them or how specific policy proposals might alter patterns of participation.

by James S. Catterall

Research interest in private schools seems to have kept pace with a recent proliferation of policy initiatives involving private education. There have been numerous efforts in Congress and at the state level to provide financial assistance to private schools. Proposals for tuition tax benefits have been heard in the U.S. Senate and some state legislatures, and are supported by the Reagan administration. Education voucher plans reappear periodically, often proposed as voter initiatives. Furthermore, aid to private schools is provided in some 30 states already, in the form of assistance for transportation or textbook costs. Beyond public assistance, the regulatory relations between governments and private schools are of current concern, as Congress examines proposals to limit the tax-exempt status of private schools.

The national preoccupation with "excellence in education" is also engendering interest in private education. It is suggested that the nation's private schools might provide examples of effective schooling to their public counterparts. Recent comparisons of public and private schools are producing vigorous debate and providing impetus for further study.

Information about participation in private schools is fundamental to understanding many of the critical aspects of private education policy. Who enrolls in private schools? Who might be likely to make the change from public to private schooling, and why? Answers to these

questions are needed to estimate the outcomes of many policy proposals. Basic issues of equity, efficiency, cost and effectiveness cannot be addressed without adequate data on who makes up the private school clientele. Before policies can be fully understood, patterns and trends in participation within the private sector should be known.

Patterns and Trends in Participation

Government agencies have not focused on private schools long enough to refine their strategies for information gathering, nor have substantial resources been devoted to this type of work until recently. However, the data do display some pertinent, changing patterns.

- **Enrollments** In the decade following 1965, private schools suffered a 30-percent decline in pupil enrollments, primarily in Catholic schools. This trend turned around in 1975, but only about one-fourth of the nearly 2 million lost enrollments were restored as of 1982-83. Catholic schools continue to lose pupils each year, while nearly every other type of private school—most of them affiliated with a church or religious group—is gaining enrollment slowly. The Evangelical Christian schools are an exception to this pattern. Their growth has been vigorous, adding about 80,000 pupils per year since 1975 and now enrolling nearly one million children. Private enrollments now account for about 11 percent of all student enrollments, down from their peak of more than 14 percent.

- **Exodus or Trickle** Suggestions that public schools are being abandoned in favor of private schools are not supported by reliable enrollment figures. The overall current rate of enrollment growth for private schools in the United States is slow—2 percent per year. Since the private school population is roughly a tenth

of that in public schools, this suggests that perhaps two-tenths of a percent of current public school pupils are annually switching to private schools. Even this small estimate of public to private transferring is high if a share of private school growth is accounted for by higher rates of private school enrollment, particularly at the kindergarten or first grade level.

- **Level of Schooling** Private schools continue to be more prevalent at elementary than at secondary grade levels. So, public policies for private schools are likely to have more impact in the lower grades, providing they are not aimed specifically to affect secondary schools by financing or regulation.

- **Geographic Distribution** Private schools are more prevalent in the Northeast and North Central sections of the country despite recent growth in the South and West. Private schools are most commonly found in central cities and are comparatively scarce in rural areas; most of the recent growth of private schools seems to be occurring in suburban areas.

- **Minority Involvement** White families frequent private schools at rates more than twice those of Black families in the United States—11 percent for Whites versus about 4.5 percent for Blacks, while families of Hispanic origin fall between these enrollment rates. The participation rate for Black children has diminished slightly in the past few years.

- **Income of Parents** Participation in private schools is highly and positively dependent on family income, for all types of schools and for families of all backgrounds. This relationship is important when it is recognized that those who would benefit most directly from proposals such as tuition tax credits or vouchers, at least initially, are families with children currently enrolled in private schools. Those who can afford the cost of

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attending private school would receive the benefits from such tax credits or vouchers. Because minority families are often less affluent than white families, and because they frequent private schools less commonly, benefit inequities will probably occur until families rearrange their patterns of school attendance.

• **Costs of Attendance** The tuitions that private school families pay vary tremendously, from a few hundred dollars at church-related elementary schools to thousands of dollars per year for other types of schools. This range suggests that tax credits or vouchers set at specific dollar amounts will mean substantially different things to different schools and families. Tuitions increased between 1979 and 1982 on a par with consumer prices, but at rates greater than increases in family income. Private schools are slowly becoming less affordable for American families.

• **Religion in Private Schools** Although private schools are not so dominated by religious institutions as they once were, private schooling in America is still very much a religious phenomenon. Despite the decline in enrollments in Catholic schools already noted, nearly 90 percent of all private schools have religious affiliations. The reason most often given by parents for choosing a private education for their children is the desire for a religious education. Therefore, public policy connections between governments and private schools will, for the foreseeable future, include significant issues of church-state relations. Religion as an issue in public policies for private schools is underscored by the rapid growth of Evangelical Christian schools, now only second to Catholic schools in enrollments within the private sector.

• **Special Education and Private Schools** Private special education schools have grown in importance for private school policy discussions. These schools were relatively insignificant seven years ago, but now enroll nearly half of the reported non-Church affiliated private school students in the United States. This is undoubtedly tied to the provision of public support resulting from The Education for All Handicapped Children Act of 1975 (P.L. 94-142) and from state initiatives in support of private options for special education students.

Future Research Needs

It should surprise no one that policymakers and others grappling with private school issues have faced less than perfect information when questions are raised. What would be the effects of specific proposals? Who would pay? What alternatives would serve similar ends? There are numerous questions important to policy decisions that seem to result in controversy more often than consensus. Private schools have not been a center of public attention long enough for there to be firm answers to many of these questions. Also, private schools exhibit varying tendencies to remain inconspicuous, which can make data collection problematic.

There appear now to be fewer reasons for disagreement on the facts of private school participation in the United States than on what to make of them or how specific policy proposals might alter patterns of participation. The past ten years have seen great improvements in the detail and completeness of the data available. The National Center for Education Statistics (NCES) has made efforts to find uncounted schools. The Census Bureau has added questions about private school

tuitions to its annual surveys. School associations seem to be keeping better track of their constituent enrollments and have been willing to be counted when researchers come knocking. Existing patterns of private school participation by school level, broad school types, family characteristics, and geographical region are widely accepted and the ability to detect changes in them are more reliable.

One need for further attention is the maintenance of current data on private school participation. Without a commitment on the part of NCES or others in the education research community to collect data on private school participation, this is unlikely to happen.

Another future need stems from enduring questions of educational practice. We are only beginning to understand events inside the walls and classrooms of these diverse private schools. The attributes of their personnel, their organizational structures, methods, philosophies, and the relative degrees of effectiveness of private schools in achieving their aims rank high as areas for future research.

Little is known about why private schools are chosen by enrolling families, and particularly about how various policy proposals might affect decisions to send children to private schools. Current patterns of participation and their correlation with family income suggest that the beneficiaries of aid to private schools would tend not to be those in greatest financial need of added public subsidies. Policies that alter patterns of participation could change this outlook. More awareness of the dynamics of enrollment decisions would contribute in important ways to an understanding of the implications of public policies for both private and public schools. ■

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PUBLIC & PRIVATE SCHOOLS ABROAD

The growth of the private sector can be viewed as an expansion of the market responding to the demand for more education as large groups of people become dissatisfied with the amount or type of education supplied by the government.

by Estelle James

Many countries besides the United States have both public and private sectors of education. In some countries private schools are relatively more important than they are in the U.S.; in other countries they are less important. Why do different countries choose widely varying systems for providing education? What difference does the choice of public versus private sponsorship and management of schools make for the funding, quality, cost, efficiency and distribution of education?

There is a wide disparity in public/private enrollment ratios across countries and levels of education. The relative size of the private sector varies from one percent to 98 percent at the primary level, and from two percent to 92 percent at the secondary level. How can this diversity be explained? Is the preference for one sector over another within a country merely a random event, or are there underlying forces that, if identified, would make it possible to predict which sector will be chosen? Economic concepts of supply and demand throw some light on these questions.

The Demand for Education

Private education can be seen as a response to an excess demand for education in the face of a limited government supply of educational services. *Excess demand* is clearly the issue in developing countries, where small-scale production and subsistence agriculture predominate,

offering only a low return on investment in education. Growing urban areas and a developing economy create higher returns on investment in education for some groups.

At the primary level, education is generally seen as being equally important in rural and urban areas, so the pressure for public education will be high and widespread. Those who already pay high taxes may be willing to pay a disproportionate amount of the public bill for higher education if they also get disproportionate access. At the secondary level, however, demand in rural areas will probably remain low and wealthy urban dwellers are already paying high taxes for universities and other public goods. They are not likely to pressure the government to supply extensive secondary education. At the same time, as numbers of primary school graduates increase, and as the incentive to acquire higher education rises, many urban middle and working class families become anxious to send their children to secondary school, even if they must pay for it themselves.

Among industrialized countries, Japan best demonstrates the pressure of *excess demand* for education. While contemporary Japan can hardly be characterized as a developing country, it has made the transition from a traditional agrarian to a modern industrial state more rapidly and more recently than most Western countries. Government policies peculiar to Japan tended to create excess demand for education by restricting the provision of services beyond a basic level. Since the end of World War II, the conservative government maintained the lowest rate of government expenditure and taxation among modern developed countries. This meant that only the minimum of public goods was supplied. Therefore the

high demand for secondary and higher education had to be satisfied by the development of private schools.

It is interesting to compare Japan with Sweden. Since World War II the government in Sweden has, in its policies regarding the provision of education, acted in almost the opposite way to Japan. Supporters of the Swedish Social Democratic Party demanded and paid for high levels of government service, particularly education. As government-sponsored services expanded, there was no leftover demand for the private sector.

It should also be noted that in Japan, as public demand for government support of education grew, particularly secondary education, rather than establish new public schools the government subsidized private schools. This policy reflects an important transitional role for the private sector. A shift from private to public financing does not necessarily imply a shift from private to public production of educational services.

Different Tastes for Education

Another way of viewing demand for private education is to see the private sector as a response to demands for *certain types* of education, rather than as a response to an undersupply of education. *Differentiated demand* appears to explain the development of private schools in modern industrialized societies.

In countries such as Switzerland, where cultural groups are concentrated in different areas, production by local government satisfies the desired diversity, making private education unnecessary. In countries where a dominant group seeks to impose its ways on others, private schools may be prohibited or

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restricted as has occurred in France and the Netherlands during anti-clerical periods. In the United States, similar feelings led to the development of the public "common school" and to the discouragement of private education during the 19th and 20th centuries. Belgium and the Netherlands are good examples of countries where differentiated demand is permitted and explains the development of private schools today. In India as well, private schools are often differentiated along lines of language, religion or caste. The same is true of Israel and Malaysia. Since densely populated urban areas are usually characterized by greater diversity as well as a market large enough to support several schools, cultural heterogeneity is likely to cause more private schools to be established in such areas.

If those demanding a different education than what is available in the public sector are also in a position to pay more for it, a price alternative will develop. Differential choices about quality are more likely to occur when income is highly stratified. This is seen in some American and Japanese cities, and in developing countries with wide income distributions like India, Kenya and Mexico.

Elite private schools are so small in number that demands for quality do not explain the existence of large private sectors. Their very eliteness comes from their scarcity. While some private schools may accommodate tastes for higher quality, the average quality of the private sector is not generally higher than the public sector, and this is particularly true of large private sectors.

The pressure of different kinds of demand rather than excess demand is probably the force behind large numbers of private schools at the primary level. The desire of parents to maintain cultural homogeneity in the learning environments of their children is likely to be greatest at the primary level, for this is the age when linguistic ability and a child's ethnic and religious identity develops. Considerations of academic quality are more likely to be important at the secondary level.

Who Supplies Private Education and Why?

In societies where education is characterized by a huge excess demand, many schools are organized in order to make a profit. The Philippines and parts of South America are good examples. More commonly, private schools are established as nonprofit organizations. In these cases, knowing the identity and motive of the founders, who start schools despite the absence of profit and monetary reward, can provide clues to understanding the size and diversity of the private sector.

One major motive for founding schools is to disguise profit distribution. Nonprofit status is usually a legal requirement for schools, but in some societies where excess demand for education is strong, there exist practices of circumvention, such as giving places to students whose families donate money to the school, or giving administrators "kick-backs" or other perquisites like expense accounts.

Benefits to founders can also take intangible forms, such as perpetuation of a family name on a building or facility. In effect, by creating these status distinctions through institutional practices, societies are also creating a payoff to founders of private schools and encouraging nonprofit entrepreneurship. These motivations are common in the U.S., but interestingly are frowned upon in other societies like Sweden.

The most potent motivation for founding private schools is ideology, most often organized religious ideology, but also political or cultural. Universally across countries, religious groups are the major founders of nonprofit institutions such as schools and hospitals. Once one group has established its own schools, other groups are moved to do the same as a defensive reaction to protect and sustain their own interests. The existence of this desire to maintain the supply of private schools whether they are profitable or not suggests that the private sector of schooling will be larger in countries with strong independent, proselytizing religious organizations competing for clients.

Salient examples of this tendency occur

in the Netherlands, Latin America and countries where missionaries were active, such as Japan, India and Kenya. Founders of private religious schools seek to cultivate religious faith or adherents, which is often inconsistent with maximizing profits. Many of these schools have had to charge fees lower than profit-making levels in order to attract students.

Statistical Evidence

Statistical studies of the determinants of private school enrollments have found religious affiliation of the population and availability of religious entrepreneurship to be an important predictor of private school enrollments. Income is also important as an indication of the ability of parents to purchase a preferred type of education for their children. Historical factors such as a tradition of private schooling are important as well. Once private schools are founded, they have great staying power, even if the original conditions under which they were established have disappeared. Although the countries considered here — especially the U.S., India, Japan, the Netherlands and Sweden — differ considerably in their level of economic development, political system, cultural values and size of the private sector in education, they are remarkably similar in the variables that explain the geographic distribution of private schools within each country.

Conclusion

In summary, it appears that different countries make very different choices about public and private education, and some reasons for these choices can be identified systematically. Further research demonstrates that high enrollments and high quality can be achieved with either system, but there are usually significant differences in costs and sometimes in product variety. When private sectors grow large, they often receive government subsidies (either as cause or effect), regulations tend to accompany these subsidies, and the regulations make the public and private systems more similar. ■

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SECULAR SCHOOLS & RELIGIOUS VALUES

A substantial number of people choose private schools because of religious beliefs. The values reflected in the public schools have influenced their choice.

by Patricia M. Lines

Private schools in the United States have long been a refuge for those who differ with the value system explicitly or implicitly adopted in the public schools. Although the evidence is far from complete, there is much to support the view that, when public schools alter their treatment of religion, they lose some pupils and gain others. Consequently, public school values can have a major impact on the formation of new private schools.

Public response to these private schools also has an impact. This response, which ranges from calling for outright prohibition to support of new schools, can be critical to their development. Tension between public and private education can be traced to the historically troubled relationship between cultural pluralism and the desire for establishing a common cultural base. Private schools have engendered varying degrees of public support over time in the United States.

The first American schools, in the 17th century, were church-related, but considered themselves "public" because they educated all children and in other ways served the public good. Colonial America ultimately followed Europe's lead and organized government-run, religious schools. Following the American Revolution, the United States became intensely interested in education as a means of eradicating class distinctions and fostering the civic values of the new nation. The idea of compelling attendance also emerged with greater insis-

tence as the 19th century progressed. The purpose was to assure that children understood the principles of religion and the law. Any distinction between "public" and "private" education was ambiguous at best.

Public schools of the 19th century espoused the same missionary goals as their private predecessors. Reactions to the new public, pan-Protestant schools occurred along both class and religious lines. Often the people who were most opposed to the development of public education were its intended beneficiaries—the working class and Catholics, who were often the same people. Religious, class and ethnic bias all worked together to alienate Roman Catholics. As political efforts to stop the development of public education failed, efforts to support private education endured.

To be sure, Catholic schools existed before this time. So did private schools of many denominations—Jewish, Lutheran, Episcopal, and Quaker to name but a few. The Catholic schools did not dominate this group. They were relatively few, as only one percent of the population at the end of the Revolution was Catholic. With the establishment of public schools based on pan-Protestant values, the enactment of compulsory attendance laws, and the arrival of large numbers of Catholics—all in the 19th century—this situation changed dramatically. Within a few decades, Catholics went from a tiny minority to the single largest religious denomination in the country.

Laws designed to enlighten poor Protestant immigrants were now applied to these Catholic newcomers, who were uncomfortable with the biases present in the public school system. Catholic leaders attacked the imposition of values in public schools, not only for the sake of Catholic children in those schools but for

the hope of obtaining state aid for the new Catholic schools. During the latter half of the 19th century, large numbers of Catholic schools were established, paralleling the development of public schools.

These new schools were greeted with hostility from the public. While the emergence of Catholic schools might have been seen as a clear benefit to overcrowded public schools, some people also saw them as a threat to public schools. By the 1920s, several states sought to enact legislative restrictions on private schools.

Emergence of Secular Public Schools

If American education has its roots in the church, and if its goal was originally to transmit a religious, cultural heritage, how did the modern, secular school emerge? The answer lies, in part, in the First Amendment to the U.S. Constitution, especially in the notion of a clear separation of church and state. Both the document and the political philosophy that gave rise to this doctrine profoundly affected education in the 20th century. The growing heterogeneity of American society had an effect as well.

To be sure, the First Amendment had little legal impact on public schools for 100 years. For many, the question of whether it applied to state governments remained unresolved. Since state and local governments were responsible for education, the religious aspects of public education seemed best left to state officials. The result was that treatment of religion in the schools varied, depending on how Jeffersonian views of a "wall of separation" between church and state endured in particular regions.

In 1962, in *Engel et al. v. Vitale*, the U.S. Supreme Court ruled that officially mandated prayer in the public schools was unconstitutional. The following year, the

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Court ruled that the Bible could not be read in school as a religious exercise, although it could be studied for its literary, historic and social value.

Responses to Public Schools Today

Today it would seem that an increasing number of Catholics regard public schools as appropriate for their children while an increasing number of Protestants do not. Catholic school enrollments have declined drastically over the last 20 years while those of Protestant private schools are increasing. Along with these changes in religious orientation, public schools have changed in other ways, favoring inquiry over rote learning, emphasizing student development over acceptance of traditional authority, and extending the curriculum to include subjects such as sexuality, evolution, drugs and alcohol. The reason that these changes are controversial seems closely bound up with the religious beliefs and sensitivities of a diverse population.

At the same time, newly created private schools have encountered hostility in many quarters during recent years. Some new schools offer cause for concern among government officials, since they have inadequate facilities, poorly qualified teachers, or too few teachers. A few schools may foster political views sharply divergent from the mainstream. While a similar hostility gave rise to an attempt to close down private schools in the early part of this century, today it gives rise to a sharp increase in litigation over standards.

The founders of new Protestant schools often believe they should not obtain approval from the state, arguing that the school is an extension of the church and that teachers are like missionaries or pastors. Those public officials who view these schools as inadequate have been using compulsory education laws and other legal standards to require them to meet state standards or to shut down. As a result of these diverging views, litigation over state regulation has increased in the past several years. More amicable forms of conflict resolution have broken down.

Tension between public officials and new private schools sometimes runs quite high. For example, in a case involving the Faith Baptist Church in Louisville, Nebraska, a local judge ordered a church door padlocked except during hours of worship, to enforce a court order closing

the school operating on the church premises. The congregation responded with sit-ins and other forms of passive resistance. Many were arrested. The impasse was not broken until the governor and the legislature acted.

The frequency of litigation under compulsory education laws and other laws regulating private schools has increased during this century. While the total number of cases of this type of litigation in the United States is only 50 for 1980, it represents a dramatic increase over the last 20 years—substantially greater, for example, than the corresponding increase in rates of litigation over truancy. One explanation for the greater increase in cases involving regulation could be the general increase in population coupled with a deterioration of other processes for resolution of disputes. However, these reasons cannot account for the extraordinarily sharp rise in regulation cases, while other types of cases have only increased slightly. It seems more likely that a combination of events has triggered the change.

Most obvious is the belief of many leaders of Fundamentalist Christian schools that education as they practice it is an extension of the Church and therefore not subject to state regulation. Many pastors and congregations regard compromise as a religious defeat rather than a political strategem. Many state officials meet this intransigence with equal stubbornness. The data may also reflect a change in the application of laws often written over a century ago, when truants were of a very different kind. There has also been a trend toward state boards setting standards for schools, rather than merely requiring attendance, which could affect levels of litigation.

Judicial resolution of these conflicts is likely to be slow in coming. Litigation has not, to date, yielded any unified legal theory and courts uphold state standards as often as they strike them down. Generally though, courts will balance the state's interest in regulation with First Amendment freedom for the individual. Courts typically rule narrowly, and the range of issues presented in various states is unlikely ever to be fully addressed by the U.S. Supreme Court.

In the final analysis, it is for legislatures to decide how much they wish to accommodate dissenting groups, and at what cost to uniformity in educational stan-

dards. State legislatures have been more responsive to the recent problems of private schools than the courts have been. The critical issues have been handled by designing more specific and narrow methods of protecting children from abuse and neglect, and by protecting parents from unscrupulous schools that make false claims about their attributes.

There appears to be no countervailing trend away from accommodation and towards stricter legislative standards. In states that do not regulate private schools at all, there is some interest in requiring reporting of data, but bills requiring this have not been passed. The only exception, perhaps, comes with the unintended consequences of recent efforts to improve education nationwide by increasing the length of the school day or school year under compulsory education laws. Such laws increase expenses for all schools.

That private schools compete with public schools is a recurring theme. The sharp rise in litigation over state regulation in private schools in the 1980s is evidence of new tension between public and private education. Some private educators view public education as subversive, substandard or otherwise undesirable. Public educators fear private schools are too good or not good enough. The question raised is whether private and public schools really compete, and if so, what the stakes are.

The fact that the most dramatic changes in the private school population have occurred during changes in public school values suggests that the most serious competition is over values. Both in the 19th century and in more recent times it appears that a substantial number of people choose private schools because of religious beliefs. Then as now, the values reflected in the public schools have influenced this choice. As a practical matter, the existence of private schools takes some pressure off public schools to be all things to all people. While no trend is discernible in the courts, the trend in state legislatures is now toward accommodation. It appears that public schools and the new private schools will ultimately make peace, much as they have in the past. As legislators and judges recognize the emergence of new groups with interests in private, and particularly religious education, room may be made for them in the American system of education. ■

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TUITION TAX DEDUCTIONS: WHAT THEY MEAN TO PARENTS

by Linda Darling-Hammond & Sheila Nataraj Kirby

Minnesota has the first state policy subsidizing private school tuition costs to pass judicial review through all levels of the court system. The state law allows parents of both public and private school children to deduct educational expenses of up to \$650 per elementary school child and \$1,000 per secondary school child from their income when figuring their state income tax liability. The actual value of the deduction varies according to the amount of expenses claimed and the marginal tax rate of the taxpayer. For example, parents earning \$9,000 in taxable income, with a marginal tax rate of 10 percent, who claimed a \$500 deduction would save just \$50 on their tax bill.

This subsidy, in existence at a lower level since 1955, is supplemented by a number of other state policies providing support for nonpublic schools and children. Other state aid includes free student transportation to nonpublic schools; direct aid to private schools for books, health services, and counseling and testing services; and provision of certain other educational services to nonpublic school children through shared-time arrangements in the public schools. These other forms of aid operate like the tax subsidy to lower the price parents would otherwise have to pay for a given quantity or quality of private school services. Thus, Minnesota provides a unique test case of how parents make school choices in an environment where private school choice is actively encouraged.

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The Study

The analysis is based on a telephone survey of 476 Minnesota parents of public and private school children, conducted during the summer of 1984. A seven-county area surrounding and including Minneapolis-St Paul was sampled. Forty-eight percent of all school-age children in the state and 58 percent of the state's nonpublic school children reside in the sample area. The region includes urban, suburban, and rural communities.

A random digit-dial telephone sample of parents was supplemented with a choice-based sample of private school parents residing within the Minnesota school district. The final combined sample consisted of 339 parents of public school children and 137 parents of nonpublic school children. The study focuses on three issues:

- Choice-making behavior and the determinants of choice.
- Level of knowledge and extent of use of the income tax deduction among the survey respondents.
- The propensity of public school parents to switch to private schools at an increased level of tax deduction.

Choice-Making Behavior

Previous studies of parental choice have found that large proportions of public school parents do not make active school choices. They simply send their child to the nearest public school for logistical reasons. Private school parents, it has been assumed, make more active choices about what type of education they want their children to receive.

In the Minnesota sample, however, public school parents were actually more likely to be "active choosers" than private school parents. Parents can be defined as "active choosers" when they consider other schools at the time of a current

school choice, or when they consider public schools when making a decision about residential location. Although somewhat less likely than private school parents to consider other schools at the time of current school choice—26 percent as compared to 34 percent of private school parents—most public school parents had considered public school quality as an important factor in determining residential location. Only 38 percent of public school parents were "non-choosers"—that is, made neither of these choices, as compared to 47 percent of private school parents. For this study, private school parents were categorized as "non-choosers" if they did not consider other schools when choosing the current school for their children, and did not consider public schools when deciding where to live.

Low income households and those with lower levels of parental education were less likely to make "active" school choices than other households. Those least likely to exhibit either type of choice-making behavior were residents of rural areas and parents who had themselves attended only private schools. Active choosers were much more likely to stress school quality factors as reasons for their choices than were non-active choosers. Situational and convenience factors were cited by public school parents who were not active choosers and moral/religious instruction in the case of private school parents.

Among active choosers, those who chose public schools were far more likely to cite the courses offered as a very important reason for their choice, while private school choosers were far more likely than their active public school counterparts to stress moral and religious instruction as a very important factor.

Higher incomes and education

increased the likelihood that parents considered public school quality in their residential choice, but these factors had a much less clear-cut relationship to whether parents considered more than one school at the time of enrollment. More affluent parents apparently "vote with their feet," that is, move to neighborhoods they consider more desirable, when thinking about school alternatives.

Current School Choice

Surprisingly, in the Minnesota sample, household income, race, and active choosing behavior were not related to the probability of choosing a private school. The higher the parents' education level, however, the more likely they were to select private schooling for their offspring. Catholics, urban households, parents with private school backgrounds, households with three or more school-aged children or with children in grades K-6 all appeared to have markedly higher propensities to choose private schools.

The foremost reasons for their choices cited by public school parents were school quality factors (29 percent), situational circumstances (21 percent), financial factors (19 percent), and convenience or proximity of the school (18 percent). Private school parents most often cited school quality factors (38 percent), moral and religious instruction (27 percent), and school discipline standards (14 percent).

Financial factors played a modest role in school choice decisions. The costs of nonpublic schooling were cited by 29 percent of public school parents as a reason for not considering other school alternatives and by 14 percent of those who had considered a private school but decided against it. Of those parents who had transferred children from private to public schools, 17 percent cited costs as the reason for the switch. Income seemed to exert only a modest influence on school choice.

Knowledge, Use, and Effects of the Tax Deduction

The Minnesota tax deduction for dependents' educational expenses can be used for expenses incurred by both private and public school parents. Tuition, books, transportation and school supplies can be claimed. Obviously private

school expenses are the largest category of allowable deductions. Knowledge and use of the deduction in this sample were strongly related to family income and to private school choice. Knowledge of the deduction was also related to parents' education levels.

Sixty-three percent of the sample had heard of the deduction—82 percent of private school parents as compared to 55 percent of public school parents. However, only 28 percent of the sample had ever used the deduction—61 percent of private school parents versus 15 percent of public school parents. Those who knew of the deduction and did not use it most frequently said they thought it did not apply to public school children.

When asked how important the availability of the deduction was in their choice of a private school, only 10 percent of private school users said the deduction was very important. Another 26 percent said it was somewhat important. Fully 98 percent of these parents said they would still have sent their children to private school if the deduction had not been available.

A Model of Switching Behavior

The propensity of public school parents to switch to private schools was also modeled, using their responses to survey questions asking if they would transfer their children at different levels of a tax deduction. At the *then* current levels of the deduction, \$500 for elementary school children and \$700 for secondary school children, 23 percent reported they would be likely to transfer. At slightly higher levels (\$850 and \$1,200) approaching those since enacted by the state legislature, a total of 30 percent reported they would be likely to transfer. More than 50 percent said they would be very unlikely to transfer in either case.

Parents who are dissatisfied with the current school appear most likely to switch given a large deduction, as are households who have children in elementary school as opposed to high school. In addition, parents who had more accurate knowledge of the deduction were less likely to say that they would transfer because of it. Somewhat surprisingly, no income effects were found, although low-income households (less than \$15,000) have a slightly higher

and high income households (more than \$50,000) a somewhat lower propensity to transfer. It could be that families with high income and education levels had already made careful choices of their current schools, through residential location or active school search, or that more highly educated parents better understand the tax subsidy and realize that the actual benefit of a tax deduction is far smaller than its face value.

Conclusions

Contrary to what most other parent choice studies have found, in this Minnesota sample neither income nor race is related to the choice of private versus public schools. In addition, public school parents were found to be more likely to exhibit active choice-making behavior in selecting schools than were private school parents. Finally, the tax deduction by itself appears to have little effect on parental choice, while disproportionately benefiting parents with higher income and educational levels.

Other policies, like free bus transportation, appear to have greater effects on parental choice. A supplemental survey of 98 nonpublic schools in the same region of Minnesota suggests that state aid to nonpublic schools may also increase access by indirectly lowering tuition costs.

The relative unimportance of the tax deduction is not surprising for at least two reasons. First, the actual value of the deduction is much smaller than its face value since it is a deduction rather than a credit. Parents must assume direct, immediate costs for private schooling before recouping a small portion of those expenses through the deduction. Only those who itemize and pay taxes are able to take advantage of it.

Second, while costs of private schooling are a factor in school choice decisions, other factors like parents' own prior schooling experiences, concern for religious instruction, and logistical considerations bear stronger relationships to school choice. For those parents at the margin, policies that directly increase access to schooling alternatives—for example, by lowering immediate costs and increasing convenience—are more likely to affect actual schooling choices than an indirect tax subsidy. ■

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DESEGREGATION & PRIVATE SCHOOLS

Under some conditions private schools further the segregation of schools, while under others they encourage racial integration of schools and neighborhoods. Clearly, the situation is more complex than first thought.

by Robert L. Crain

The public controversy surrounding recent proposals to support private schools through tuition tax credits has prompted an interest in the impact of private schooling on racial segregation in education. Coleman, Hoffer and Kilgore analyzed a national sample of high schools and concluded in 1982 that although private schools have few minorities, the minorities they do have are highly integrated. They concluded from this that minorities are as desegregated now in the nation's mixed system of public and private schools as they would be if private schools did not exist and all students attended public schools.

A further examination of the data suggests that the situation is more complex. It looks as if Catholic schools, which make up the majority of American private schools, are more segregated than the public schools in some important cities, and that the transfer of Whites to private schools has increased segregation in education.

This study examines the degree of segregation in the Catholic schools of two large metropolitan areas—Chicago and Cleveland. Both systems are smaller than the local public schools and have proportionately fewer Blacks but more non-black minorities. Catholic elementary schools in both cities are as highly segregated as the public schools.

The results are striking for two reasons:

- The Chicago Catholic school data were obtained for 1980, while the Chi-

cago public school data are for 1968. The twelve-year span is important. The Chicago public school system in 1968 was as highly segregated as any system in the North and has since desegregated to some extent. Accordingly, the Chicago Archdiocese is not only more segregated than the Chicago public schools but also may represent the most segregated elementary school system, public or private, in the United States.

- The unrestricted free choice system should favor the Catholic elementary schools. Blacks are free to travel to predominantly White schools, but Black parents do not send their elementary school children long distances to attend schools in White neighborhoods—either by choice or because White Catholic elementary schools do not encourage them to do so.

In Chicago there are 95 Catholic elementary schools which are predominantly White and enroll fewer than 10 Black students—most of them having none. At the same time, freedom of choice does mean that Whites are free to avoid predominantly Black schools, and they do. In Chicago Catholic elementary schools, only 4.9 percent of Black students are in predominantly White schools and only 1.5 percent of all Whites are in predominantly Black schools.

The pattern in Cleveland's Catholic schools is the same but much more pronounced; 16.8 percent of Black but only .6 percent of Whites are in schools where they are in the minority. Only 226 of Cleveland's 36,000 non-Hispanic White elementary school students attend predominantly Black private schools. By comparison, there were nearly 7,000 Whites in Cleveland's predominantly Black public elementary schools.

Catholic high schools in both cities are more desegregated than the public

schools. As mentioned, private schools do not typically follow the neighborhood boundary rule. At the high school level this results in a decrease in segregation to the extent that sometimes Black students are willing to travel long distances in order to attend predominantly White schools. Accordingly, the free enrollment policy of the Catholic schools that seemed to segregate elementary school students appears to promote desegregation at the high school level. In Chicago, for instance, 31 percent of all Blacks in Catholic high schools are in predominantly White schools, compared to 4.9 percent of elementary students. The data for Cleveland are more striking because all 18 Catholic schools in Cuyahoga County are predominantly White, leaving Black high school students highly integrated. Segregation levels for Hispanics seem to follow the same elementary and high school trends. Segregation is high at the elementary level in both cities, and lower for high schools.

The Coleman, Hoffer and Kilgore findings are further mitigated by their failure to recognize that parochial school systems have never been bound by the desegregation policies that are normally applied to public school systems. Certainly no public school system as large as either of these private school systems and with as small a number of Black students could expect to avoid being required to desegregate.

This does not mean that parochial school systems are always more segregated than public systems, however. In particular, some cities, Hartford and Trenton for example, that have relatively small total pupil enrollments and large proportions of Black students in public schools may have parochial schools that are more integrated.

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White Flight to Private Schools

Private schools can affect the amount of racial segregation in education by providing havens for Whites fleeing from newly desegregated schools. There is racially motivated White flight from segregated school systems as well, in the form of White withdrawal from public schools with large Black enrollments. Coleman, Hoffer and Kilgore argue that private schools do not create racial segregation in public schools, but their reasoning is circular. They arrive at their conclusion through a process which assumes that there is no White flight to private schools.

Coleman, Hoffer and Kilgore analyze the role of private schools by asking, "What would happen if all private schools were closed and the students presently enrolled in them were returned to public schools?" If private schools have had a segregating influence in America, then closing them and reassigning all the students to public schools should result in a lower index of segregation. They conduct a "thought experiment" that does exactly this, and conclude that if private schools were closed the public schools would be no more racially integrated than the present mix of public and private schools are. Hence the private schools do not have a segregating influence.

There is a serious error in their hypothetical model. Coleman, Hoffer and Kilgore assume that if private schools were closed, the White and Black students in them would be dispersed into the existing public school system, with each public school gaining an increase in White and Black enrollment proportional to its present White and Black enrollment. Since nearly all Whites in public schools are in predominantly White schools, the assumption is that nearly all Whites in Catholic schools live in areas served by predominantly White schools, despite

research on White flight to the contrary.

In other words, this model assumes that there was no White flight from public to private schools because of race. Of course, if there were no White flight for racial reasons, then there would be no reason to assume that the movement from public schools to private schools created segregation. We conclude that the accounting model used to measure the segregative impact of private schools on the combined public-private system of schools is in error. It appears that private schools have helped to foster racial segregation in American education.

What Private Schools May Be Doing to Help Desegregation.

The role of private schools in promoting racial segregation in American education is not one-sided. There are three ways in which private schools may work to help integrate American schools, or at least help integrate the neighborhoods these schools serve. First, if White families should flee from newly desegregated public schools it is clearly preferable for them to remain in the city sending their children to private schools than for them to move to the suburbs. Remaining in the city offers families the option of returning their children to the public schools at a later date.

Second, in at least a few cities the private school system provides an opportunity for voluntary integration for some Black students—not cities like Chicago and Cleveland, but perhaps in smaller cities with predominantly Black public schools. The public schools in these cities could provide opportunities for desegregation by allowing Black students in predominantly Black central city systems to transfer to suburban schools.

Finally, in segregated school systems it is often the case that an integrated neighborhood may have a school which is overwhelmingly Black and hence unac-

ceptable to many White families. In such a situation a private school alternative may enable some families to remain living in their integrated neighborhoods rather than moving out and hastening the process of neighborhood resegregation. The public schools can solve this problem without relying on private schools, either by providing "magnet" alternative schools or simply by desegregating.

The Educational Effects of Attending Desegregated Private Schools

Coleman, Hoffer and Kilgore claim that the parochial school is a "common school," better able to serve the needs of minority students than is the public school system. In their study the Black students in private high schools score high on standard achievement tests, but this may be because private schools only admit brighter minority students. It may also be because the Black students in their study were attending predominantly White private high schools. Research has shown that Black students score higher on achievement tests as a result of desegregation, and the Blacks in predominantly White Catholic schools may not be scoring higher than they would if they were in desegregated public schools.

Conclusions

The optimistic conclusions drawn by Coleman, Hoffer and Kilgore do not seem to be supported by the data from the two large metropolitan areas studied here. These data provide little reason to believe that the impact of private schools is simply benign. At the same time, there are probably not enough data available to draw a more reasonable but complicated conclusion: that private schools further the segregation of schools under certain conditions and encourage racial integration of either schools or residential neighborhoods in others. ■

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ACCESS & CHOICE

The Case of Blacks in Urban Private Schools

by Barbara L. Schneider and Diana T. Slaughter

Black students are attending urban private schools in increasing numbers. Enrollments in private schools across the nation essentially remained constant or declined between 1970 and 1980. During this same period, Black enrollments increased as a percentage of total elementary private school enrollments from 3.7 to 5.5 percent, according to the National Center for Education Statistics.

Were it not for the increased number of minority students in private schools, many of these schools would have enrollment declines. For example, in Chicago-area Catholic schools, Black students represented 17 percent of the total population of elementary students in 1970. By 1980 the percentage of Black students in these schools increased to 30 percent. Catholic schools are not the only type of private school to show increases in Black enrollments; headmasters of small, private, independent schools also report increases in Black enrollments.

There are several speculations as to why the growth in Black enrollments is occurring. Generally, it is emphasized that Blacks seek higher levels of academic achievement through better training than they can receive in public schools, that they seek a measure of control and authority in their schools, and that they seek a greater congruence between educational values and their own beliefs and aspirations. Yet there is little empirical research on why Black parents choose one type of educational experience rather

than another for their children, particularly at the elementary level.

In what types of private schools are increased Black enrollments occurring? What types of communities do urban private schools serve? How much difference is there between schools where increases in Black enrollments are occurring and those where Black enrollments remain stable or are declining?

The Study

To ascertain the types of private schools with increasing Black enrollments, 99 private elementary schools and preschools in Chicago were contacted by telephone. The building leader, generally a principal, was questioned about total enrollments, Black and other minority enrollments for 1970, 1975, and 1981. If the school had an increase of over ten percent in Black enrollments, the interviewer probed for reasons. Finally, the building leader was asked if the school served the neighborhood community, drew its constituency from all parts of the city, or served both neighboring and city-wide populations.

Additional information on the schools in the sample was obtained from the *Illinois State Board of Education*:

- School characteristics such as affiliation of school, grades served, enrollments by grade, and size of teacher and administrative staff.
- Student characteristics such as percentage of students from low-income families and sex ratios.

The 1970 and 1980 U.S. Census tapes were used to describe the characteristics of the communities served by these urban neighborhood private schools. Information on family structure, age, race, housing values, occupation and income was obtained for residents living

in the census tracts where the schools were located.

Black Enrollments in Different Types of Schools

Based on the reports of the 99 schools, total enrollments in private schools steadily decreased since 1970, while the Black population among this sample increased from 33 percent in 1970 to 45 percent in 1981. This proportional increase in Black enrollment occurred in every type of private school. The highest proportional increases occurred in non-religious schools. What is most striking overall is how quickly the percentage of Black enrollments has changed. In 1970 there were 72 schools in the sample that were less than 20 percent Black. By 1981 only 54 schools were less than 20 percent Black. However, the increase in the percentage of Blacks in private schools does not mean that private schools are becoming more desegregated. In 1970, 17 schools in the sample were over 80 percent Black; by 1980, 35 schools were over 80 percent Black. The number of schools nearly all Black more than doubled in a ten-year period.

Types of Communities Served

Census areas where private elementary schools increased their Black enrollments contained fewer Whites and more Blacks than areas with no increases. Further, there are more children 5-17 years old in census areas where Black enrollments increased. With respect to population density and number of families, more married couples and more single parents, both female and male, live in census areas that are experiencing increases in Black enrollments than in areas that are not showing such increases.

The majority of private schools where Black enrollments are rising consider

Barbara L. Schneider and Diana T. Slaughter are professors in the School of Education at Northwestern University. This *Perspective* summarizes their papers "Accessing Educational Choices: Blacks in Urban Private Elementary Schools" and "Newcomers: Blacks in Private Schools".

themselves neighborhood schools and serve the communities in which they reside. There are significant differences in community characteristics between schools where there have been increases in Black enrollments and those that show no increase. Schools with increases in Black enrollments tend to serve areas where there are lower income and occupational levels than schools that have no increase in Black enrollment.

In areas where there are private elementary schools with increases in Black enrollments, there are more individuals employed as federal, state and local government workers, teachers, health professionals, and also more unpaid family workers than in areas not showing increases in Black enrollments. These occupational differences are reflected in earned income. In local areas within the Chicago sample where there were no increases in Black enrollment in private elementary schools, the number of individuals at each income level from \$15,000 to over \$75,000 is higher than in areas where there were increases. This finding suggests that on the average, families are poorer in areas showing increases in Black enrollments in private elementary schools than families in areas with no such increases.

Diversity in School

There are several differences between private elementary schools with increases versus those with no increases in Black enrollment. For example, schools with increases in Black enrollments are smaller than those with no increases in Black enrollments. These results are consistent across all grade levels. The smallest difference between the two groups of schools occurred at the preschool level, while the greatest difference was at the upper school grades.

Private elementary schools with increases in Black enrollments report more students from low-income families than schools with no increases. This finding is consistent with the findings related to community characteristics. Finally, there are more teachers and staff in private elementary schools with no

increases in Black enrollments than in schools showing increases in Black enrollments.

In the telephone survey, school administrators were asked to offer their own perspectives about why the number of Blacks had increased in their school. The most frequent explanation was the changing composition of the community. Further analysis of census data supported these statements. Increases in Black enrollments in private elementary schools occurred in communities with increasing proportions of Black residents. Other responses included a decline in quality of education available in public schools, a rise in income of local families making private schooling affordable for more Blacks, increased concern for school discipline, and increased attention to nonpublic schools by the media and the federal government. These findings suggest that the reasons for increased Black enrollments in private elementary schools are probably not sufficiently explained by popular notions of widespread dissatisfaction with the public schools. What emerged instead from this study of private elementary schools in Chicago is a mixed portrait consisting of a variety of motives, aspirations and circumstances.

Access and Educational Aspirations

Areas representing all income levels contain private elementary schools that have had increases in Black enrollments. Why, then, are Black parents at all levels of income sending their children to private elementary schools? The poor quality of education being offered in urban public schools is perhaps the most frequent explanation given for increases in Black enrollments in private schools. This explanation might suggest that some Blacks are now affirming the value of education, but the findings of the present study suggest that this explanation is incomplete.

Blacks have consistently sought quality education, but what has changed recently is *access*. In Chicago, for example, separate Catholic schools for Blacks were supported and encouraged from the

beginning of the 20th century. Even when Blacks valued quality education and had financial resources, they were not able to gain access to private education except in Catholic schools. The situation changed as enrollments declined. One way for private schools to remain operational is to draw students from other populations in the community, those currently not being served by the private sector. Admitting Blacks may be managerially effective in private schools where enrollments are declining. As neighborhoods have changed, some schools have actively recruited students from the new resident population.

Access, however, only partially explains why Black enrollments in private schools are increasing. Given that the population of Black families who can afford private schools has increased considerably, why is it that some Black families choose private schools while others do not?

A closer examination of four urban private elementary schools in the Chicago sample shows that parents have different educational philosophies that often coincide with those of the schools their children attend. While all parents value excellence in education, their definitions and criteria for excellence vary greatly. Some parents prefer a more structured curriculum, while others prefer a more individualized approach. Some prefer schools committed to high parent involvement, while others let schools assume the major responsibility for their child's education. College preparation and traditional instruction are preferred by some, while others seek learning experiences that emphasize the cultural and social backgrounds of the students.

A diversity of responses comes from the parents of children in the four schools studied intensively within the 99-school sample of private elementary schools in Chicago. The children at these schools are generally achieving at grade level or above in reading and mathematics. Parental philosophies and their implications for the children in these schools are further analyzed in the forthcoming report, "Newcomers: Blacks in Private Schools."

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TEACHER PAY — PUBLIC AND PRIVATE

On average, the nonpublic school teachers were able to estimate within 5% what they would have earned if they had taught in the public sector. The teachers were aware of the sacrifice and in general satisfied with their career choices.

by Jay G. Chambers

Public school teachers are paid higher salaries than private school teachers. How is it possible for such salary differences to be sustained between the two groups? There are many questions to ask when making a comparison of teacher markets in the public and private sectors. Do public school teachers have better qualifications? Are private schools better places in which to work? Are they able to pay lower wages for comparable teachers? Do public and private schools even operate in the same market for teaching personnel? Are those individuals who seek employment in the private school sector drawn from the same population as those seeking public school employment? What part does the structure of ownership or sponsorship of the school play in the determination of teacher compensation? Because of the importance of teachers' salaries in school budgets, answers to these kinds of questions also tell us a great deal about the factors underlying the differences in the cost and quality of public and private schooling.

The Data

The data for this analysis came from an intensive survey during the 1981-82 school year of public and private schools, carried out by IFG, within the greater San Francisco Bay Area, including the central cities of Oakland, San Jose and San Francisco.

Samples were stratified within each of the public and private schools to achieve maximum diversity among the respondents and to ensure the adequate repre-

sentation of respondents in each stratum. The private sector was stratified by level and category of school. The levels were elementary and secondary. There were four categories of private schools: Catholic parochial, which includes those schools operated independently of the local Diocese; Catholic private schools, which operate from local parishes and are under some degree of control by the local Diocese; other religious and nonsectarian private.

The public sector sample was designed to include the maximum number of districts among the responses. Questionnaires were sent to superintendents, school principals or directors and teachers, including both lay and religious personnel. The sample includes 105 public schools and 168 private, and between 400 and 500 teachers in each of the two sectors. The overall response rate was approximately 20 percent.

The Results

Our findings confirm that public school teachers earn more than teachers in nonpublic schools. Teachers in parochial schools are the lowest paid, while teachers in nonsectarian private schools are the highest paid among nonpublic school teachers. Returns to experience, further qualifications and credentials form different patterns of remuneration in each sector.

Catholic private schools exhibit the same patterns of variation in teachers' salaries as the nonsectarian private schools, while the patterns for Catholic parochial schools are similar to those for other religious schools. Each of these two groups of nonpublic schools exhibit different patterns from those observed in the public sector. This finding underscores the need to investigate more closely various factors such as teacher

education, experience and working conditions in explaining wage differences between sectors. Everything else being equal, the parochial schools show a salary differential 20 to 30 percent lower than that of public schools, while the private schools, both Catholic private and nonsectarian schools, show about an 11 percent lower salary for teachers.

Compensating Education and Experience

Teacher education and experience are compensated differently in the public and nonpublic schools. Teachers with California State teacher certification receive wage premiums in the public and parochial school sectors, but no such premium is associated with certification of private school teachers. With respect to educational preparation, nonpublic schools tend to compensate teachers somewhat less for additional educational attainment than do public schools.

Compensation for experience shows some similarities between public, private, and parochial schools. In all three types of schools, years in the present school or system tend to be more important than overall years of experience in causing salary differences among teachers. This finding is consistent with the hypothesis that specific knowledge of school operations is more important than general teaching skills. The earnings profile peaks out at about 52 years of age in the parochial schools and about 51 years of age in the private nonsectarian schools, in contrast to about 46 years in the public sector.

Some other findings of the study point to additional differences between the sectors:

- Larger class sizes, traditionally disdained by public school teachers, tend to raise salaries in the private sector.

Jay G. Chambers is senior research economist at IFG. This Perspective summarizes his paper "Patterns of Compensation of Public and Private School Teachers".

- Strong commitment to the school raises salaries among teachers in both the public and private sectors, but has no significant impact in the parochial schools.

- Teaching outside one's area of training depresses salaries in the public sector, presumably due to lower ability to perform the job adequately. However, the same situation in private schools produces higher salaries. There are no statistically significant effects of teaching outside the area of expertise in the parochial schools.

- All else being equal, public schools pay white males about two percent more than white females. Nonpublic schools show a nine percent and ten percent male-female salary differential for whites in parochial and private schools, respectively. Male-female wage differentials among minorities follow similar patterns across sectors, except that they are two to three times larger in each case.

- School size tends to raise salaries in the private school sector, but not in the public sector. This effect is independent of whether schools are elementary or secondary. Some of the differences in compensation between public and nonpublic schools may well be attributed to the fact that public schools are, on average, relatively larger, holding constant level of instruction.

On average, public school teachers earn the highest salaries. Public elementary teachers' salaries in this sample average \$23,789, while public secondary salaries average \$25,941. In contrast, private elementary salaries range from \$11,713 in the Catholic parochial schools to \$14,360 in the nonsectarian private sector. Private secondary teachers' salaries range from \$10,931 in the other religious sector to \$16,922 in the nonsectarian private sector.

Another way of comparing the compensation and employment patterns of public and private school teachers is to simulate what the average teacher in one sector would be making if he or she taught in one of the other sectors. Such simulations suggest that public school teachers would be the highest paid regardless of the sector in which they worked. The reason for this inference is that, on average within this sample, public school teachers possess relatively

greater levels of those characteristics, like education or experience, that are compensated in the market for school teachers.

What do these teachers give up to work in the sector in which they are presently employed? Public school teachers would have to give up somewhere between \$2,000 and \$9,000 a year to teach in the nonpublic schools, depending on the sector and level. In all cases, the sacrifice for teaching in the nonpublic sector as opposed to the public sector is significant, amounting to about 40 percent of annual salary.

The teachers in this sample of nonpublic schools were fully aware of the magnitude of their financial sacrifice for working in the private sector. Public school teachers were asked what they thought they would earn in the private sector, and private school teachers were asked what they thought they would earn in the public sector. On average, the nonpublic school teachers were able to estimate within five percent what they would have earned if they had taught in the public sector. The teachers were aware of the sacrifice and in general satisfied with their career choices.

There has been considerable discussion of what might happen to educational costs under alternative arrangements for the financing of schools or under arrangements that offer greater school choice. To analyze organizational factors, schools were categorized as public schools; parochial schools, regardless of religious affiliation; Catholic diocesan high schools, which are centrally run by the local Catholic diocese; Catholic private schools, which are schools generally owned and operated by religious orders within the Catholic Church and run independently of the local diocese; schools owned by a central religious association at the regional or national level; other nonprofit schools; and proprietary, or for-profit schools.

The patterns of the salary differences suggest that lower wages are found where the financial incentives of keeping costs low by managers and owners are greatest and where survival is dependent on market performance. We have already observed that nonpublic schools pay lower teachers' salaries. Now, these results indicate that holding other factors

constant, the proprietary schools pay almost 22 percent lower wages than do the public schools, and only the parochial schools pay lower salaries, almost 27 percent lower than those of the public schools. The salaries at diocesan high schools are 19 percent lower than those of the public schools, while the remaining categories of school types range from about seven percent to 12 percent lower salaries than public schools.

Based on this analysis one could conclude that a free market for educational services as might arise under a voucher-type arrangement would be likely to lead to lower salaries for public school teachers. However, the infusion of public funds into nonpublic schools, and particularly the potential for restrictions on expenditure of those funds that could accompany their utilization, may well lead to an increase in the salaries paid nonpublic school teachers.

At the same time, the public schools would then be subject to competition for public funds with nonpublic schools and might tend to seek greater efficiencies in staffing and compensation. To the extent that this occurred, salaries for teachers in the public and nonpublic schools would be likely to move closer together. Private teacher salaries would be likely to rise as public funds infiltrated private programs. The market-survival instincts of private school managers might well tend to decrease, while these instincts would be likely to increase somewhat among public schools. By making public and nonpublic schools more alike in their sources of funding, the prospect of teacher unionization might also have to be considered among nonpublic schools.

Finally, one can argue that at least some of the existing public school salary premium is attributable to the greater demands for public outputs and the requirement of serving relatively more diverse student populations in public schools. If private schools were to participate in a voucher system with a non-discriminatory admissions policy and other public requirements, they would probably have to pay higher teacher salaries. More diverse student populations will increase the difficulty of teaching and hence tend to escalate the pay required to induce teachers into jobs. ■

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WHERE TEACHERS WORK: THE IMPORTANCE OF RACE

by Craig E. Richards & Dennis J. Encarnation

One consequence of the school reforms of the past two decades has been a restructuring of the labor market for educational employees. Major finance and governance reforms have altered patterns of recruitment, hiring and seniority. Not only do reform proposals have implications for the employment opportunities of teachers generally, but in particular they can be decisive in shaping the racial balance of teachers in American schools. For example, compensatory education in the 1960s, enacted in response to social upheavals and urban poverty, had the effect of expanding minority employment in the public schools, especially for Blacks. More recently, bilingual education has increased the employment of Hispanics.

Patterns of employment for minority groups have been largely overlooked in the current discussion of the characteristics of public and private schools. Any change in current policies of public subsidy and regulation of private schools would be likely to have an impact on teacher employment. If the reforms of the 1980s include a policy change opening the way for enlarged public support of private schools, the comparative composition of the labor force across the two sectors will become a more important public policy issue. Even in the absence of such a change, racial patterns of employment are a significant dimension of public and private schooling that need

to be understood when discussing how the two sectors operate in different ways.

Minority Teachers in Public Schools

Cursory evidence suggests that minority student enrollment is an important determinant of employment of minority teachers in schools. To assess its impact in a state school system, California schools were selected because they had employed large numbers of minority teachers over the past 20 years, and the probability of a minority teacher being employed in a school with specified racial concentrations was examined. The independent effects of selected variables commonly recognized as influencing teacher demand and supply were controlled statistically. The model took the number of employed California public school teachers in 1981 and isolated the importance of teachers' race in predicting the level of minority enrollment in the schools where teachers were assigned. Four results can be identified.

First, the race of the teacher and the level of enrollment of minority students in the school are the two most important determinants of whether a teacher will be employed and where. A teacher's race is far more important as a predictor of where he or she is likely to work than are a host of other personal characteristics: sex, teaching credential and years of teaching experience. Similarly, Black or Hispanic student segregation is more important as a predictor of the percentage of minority teachers employed than are a variety of job-related characteristics, including the grade level of a school and the relative growth or decline of a school's minority and Anglo population.

Second, Anglo, Black and Hispanic teachers have different labor market experiences. Hispanic teachers are

employed at higher rates in schools with high Hispanic enrollments than are Black teachers in schools with high Black enrollments. This pattern occurs even though Black pupils, on average, are more racially isolated than Hispanic pupils. Anglo teachers predominate in schools where Black and Hispanic pupils are a small percentage of the total pupil population.

Third, growth and decline among Anglo, Black and Hispanic students also contributes to racially based employment and assignment. In California, the schools growing at the fastest rate are elementary schools in predominantly Hispanic areas. In seeking and retaining employment in these schools, Hispanics have an advantage over both Black and Anglo teachers when they hold a bilingual certificate. Indeed, Hispanics alone showed a substantial net increase in employment as teachers in California from 1979 to 1980. In contrast, the rate of employment of Anglos showed a sharp decline, as did the rate of Blacks.

Fourth, state and federal categorical aid programs may also exacerbate the effects of teacher race and student segregation on educational employment. For example, bilingual education programs play a significant though fiscally constrained role in employing Hispanic teachers with bilingual qualifications in schools with a high proportion of Hispanic students. Hispanic teachers with general credentials are more often employed in less segregated schools. This pattern of employment is not simply a function of assigning teachers with special skills to the schools where bilingual education is most needed: Anglo teachers with bilingual credentials teach in schools less segregated than do Hispanics without bilingual credentials.

Craig E. Richards is a professor in the Graduate School of Education at Rutgers University, and Dennis J. Encarnation is a professor at the Harvard Business School. This Perspective summarizes their paper, "Race and Educational Employment: Public and Catholic Schools Compared".

Public and Catholic Schools Compared

To explore variations in minority employment in the public and Catholic schools, patterns of employment for elementary and secondary teachers were examined in these two school sectors within the six counties surrounding San Francisco Bay. Data were drawn from a survey of public and nonpublic schools in these counties, conducted during 1981-1982. Environmental determinants of minority employment in public and Catholic schools were analyzed to explain variation in the two sectors. Subsequently a more detailed analysis of the different employment experiences of Black and Hispanic teachers within public and Catholic schools was developed.

A review of existing literature identified several environmental determinants of minority employment in elementary and secondary schools. In the institutional environment of schools, these determinants — e.g., targeted aid for certain groups of students — were related to school sector as well as to the level and type of government involvement. Additional sources of variation may be found in the consumer environment of schools, which is shaped by determinants such as the composition of the student body and the changing size of the faculty. Isolating the contribution of separate environmental factors to minority employment, the empirical findings combined with limited outside evidence give reason to hypothesize significant variation among and between private and public schools in their employment of Anglos, Blacks and Hispanics. Besides the environmental determinants that were identified, three additional factors appear to have an impact on variation in the two sectors and should be taken into account when predicting levels of minority employment: student segregation, employment growth, and targeted aid from categorical programs.

The data on teacher employment in California schools show that Anglo, Black

and Hispanic teachers tend to work in different types of schools in the public sector. To extend this analysis by comparing employment within two sectors of schooling, statistical methods were used to find out if the number of minority teachers employed in a school could be predicted by whether the school is public or Catholic, school location, school level, participation in federal programs, proportion of minority and low-income students served, overall enrollments, and teacher characteristics.

In Catholic schools, the employment of minority teachers seems to be less sensitive to the proportion of minority students enrolled than in public schools. Public schools with higher proportions of Black and Hispanic pupils predictably hired more Black and Hispanic teachers. Stated in another way, client characteristics influence the employment of minority teachers more strongly in the public sector than in the Catholic schools.

Some of the other findings that came out of the study provide further insight into the relationship between minority employment, school sector, and policy changes:

- The proportion of Black students predicts the employment of Black teachers in both public and private schools, while the proportion of Hispanic students does not appear to help predict levels of Hispanic teacher employment in Catholic schools.

- Larger schools in both sectors tend to hire more Black teachers, whereas only larger public schools tend to hire more Hispanic teachers.

- In schools with larger numbers of teachers with less than five years of teaching experience, higher numbers of Hispanic teachers will be found. This is not the case for Black teachers.

Conclusion

The analysis supports the conclusion that the type of school and the composition of its clientele are important in

explaining the racial patterns of minority teacher employment. Within the public schools studied, the relationship of teacher employment and racial composition of the student body is particularly strong and holds separately for both Black and Hispanic teachers. In Catholic schools, the relationship is much weaker. These differences may be due to a combination of fiscal, regulatory and judicial mandates of the previous decade that placed pressures on public schools to provide more minority employment in response to the proportions of minority students in the schools. Public schools, in contrast to private schools, are more sensitive to these pressures.

It is also noteworthy that the proportion of Black students predicts the employment of Black teachers for both public and Catholic schools, but the corresponding relationship for Hispanics was found only in the public sector. While the overall levels of employment of Black teachers in Catholic schools is quite low, Catholic schools have also responded to the racial composition of their clientele.

There is cause for concern, not only for public schools, but also for the overall labor market in education, that most employment gains for minority teachers have been limited to public schools with high proportions of minority students. The prevailing economic climate for education in combination with the continuous decline in student enrollment in suburban schools suggests that the employment of minority teachers is likely to continue in the present pattern. Furthermore, the evidence suggests that general aid programs for financing education have not improved minority employment, and that categorical aid has contributed to increased minority employment only in urban, segregated, public schools. The present trend away from categorical aid and toward block grants is likely to dampen the positive employment effects of previous categorical funding. ■

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